

OVERALL LAPTOP COST COMPARISON

	CONFIGURATION 1	CONFIGURATION 2	CONFIGURATION 3	CONFIGURATION 4	CONFIGURATION 5	CONFIGURATION 6	CONFIGURATION 7	CONFIGURATION 8	CONFIGURATION 9	CONFIGURATION 10	CONFIGURATION 11	CONFIGURATION 12	CONFIGURATION 13	CONFIGURATION 14	CONFIGURATION 15	CONFIGURATION 16	CONFIGURATION 17	CONFIGURATION 18
	10" TABLET	10" SEMI-RUGGED TABLET	12" CHROMEBOOK	12" CONVERTIBLE BUSINESS LAPTOP	12" CONVERTIBLE PERFORMANCE LAPTOP	12" 2-IN-1 BUSINESS LAPTOP	12" 2-IN-1 PERFORMANCE LAPTOP	14" CHROMEBOOK	14" BUSINESS LAPTOP	14" PERFORMANCE LAPTOP	14" 2-IN-1 BUSINESS TABLET	14" 2-IN-1 PERFORMANCE TABLET	14" SEMI-RUGGED LAPTOP	15" BUSINESS LAPTOP	15" PERFORMANCE LAPTOP	15" WORKSTATION LAPTOP	17" PERFORMANCE LAPTOP	17" WORKSTATION LAPTOP
																		
DELL Sterling Computers MA-IS-2240252	Latitude 7320	Latitude 7220 Rugged Extreme	Latitude 5400 Chrome	Latitude 5330 2-in-1	Latitude 5330 2-in-1	Latitude 7330 2-in-1	Latitude 7330 2-in-1	Latitude 5400 Chrome	Latitude 5430	Latitude 5430	Latitude 7430 2-in-1	Latitude 7430 2-in-1	Latitude 5430 Rugged	Latitude 5530	Latitude 5530	No Offering	Precision 5770	No Offering
	\$1,580.48	\$1,901.14	\$958.04	\$1,460.66	\$1,666.68	\$1,633.82	\$1,839.84	\$1,145.37	\$1,481.45	\$1,693.34	\$1,672.29	\$1,866.75	\$2,107.82	\$1,491.71	\$1,656.28	No Offering	\$2,403.00	No Offering
HP Golden Star Technology MA-IS-2240253	No Offering	No Offering	No Offering	EliteBook x360 830 G9	EliteBook x360 830 G9	No Offering	No Offering	Pro c640 G2 Chromebook	ProBook 640 G9	ProBook 640 G9	EliteBook x360 1040 G9	EliteBook x360 1040 G9	No Offering	ProBook 650 G9	ProBook 650 G9	No Offering	No Offering	No Offering
	No Offering	No Offering	No Offering	\$1,485.00	\$1,699.00	No Offering	No Offering	\$1,010.00	\$1,210.00	\$1,480.00	\$1,652.00	\$1,879.00	No Offering	\$1,285.00	\$1,520.00	No Offering	No Offering	No Offering
LENOVO Technology Integration Group MA-IS-2240254	ThinkPad X12	No Offering	100e Chromebook	ThinkPad L13 Yoga Gen 3	ThinkPad X13 Yoga Gen 3	ThinkPad L13 Yoga Gen 3	ThinkPad X13 Yoga Gen 3	14e Chromebook	ThinkPad L14 Gen 3	ThinkPad L14 Gen 3	ThinkPad X1 Yoga Gen 7	ThinkPad X1 Yoga Gen 7	ThinkPad T14 Gen 3	ThinkPad L15 Gen 3	ThinkPad T16 Gen 1	ThinkPad P1 Gen 5	ThinkPad P16 Gen 1	No Offering
	\$1,536.99	No Offering	\$428.99	\$1,466.99	\$1,857.99	\$1,466.99	\$1,857.99	\$1,099.99	\$1,325.99	\$1,553.99	\$1,825.99	\$2,031.99	\$1,433.99	\$1,379.99	\$1,781.99	\$2,585.99	\$2,401.99	No Offering
MICROSOFT Zones LLC MA-IS-2240255	Surface Go 3	No Offering	No Offering	Surface Laptop Go	No Offering	Surface Pro 8	Surface Pro 8	No Offering	Surface Laptop 4	Surface Laptop 4	Surface Laptop Studio	Surface Laptop Studio	No Offering	No Offering	Surface Laptop 4	No Offering	No Offering	No Offering
	\$895.10	No Offering	No Offering	\$1,147.20	No Offering	\$1,377.75	\$1,690.65	No Offering	\$1,388.25	\$1,571.75	\$1,678.20	\$2,050.25	No Offering	No Offering	\$1,686.90	No Offering	No Offering	No Offering

Updated 07/19/2022

CONFIGURATION 2 10" SEMI-RUGGED TABLET (MIL-STD-810G COMPLIANT) COMPARISON					
		Dell Latitude 7220 Rugged Extreme	HP No Offering	Lenovo No Offering	Microsoft No Offering
		\$1,901.14	No Offering	No Offering	No Offering
Features	Base Specifications	Product Details	Product Details	Product Details	Product Details
Weight (lbs. including battery)	3	3			
Display Size	10 inch FHD Touchscreen	11.6 Inch FHD Touchscreen			
Processor	Intel Core i5 8365U 1.90GHz, 8M, 4 Core, 8 Thread	Intel Core i5 8365U 1.90GHz,8M, 4 Core, 8 Thread			
BIOS Configuration	Boot to Hard Drive	Boot to Hard Drive			
Operating System	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit			
RAM	16GB DDR3 non-ECC	16GB DDR4 non-ECC			
Hard Disk	256GB PCIe non-OPAL	256GB PCIe non-OPAL			
Removable Storage					
Video Graphics	HD Graphics	Intel HD Graphics 620			
Web Camera	Front IR	Front IR			
Sound	High Definition Audio	High Definition Audio			
Network Interface					
Broadband Interface					
Wireless Interface	802.11 AX	Intel 802.11 AX			
Bluetooth Interface	5	5.2			
Biometrics	Yes	Yes			
Security	Intel vPro	Intel vPro			
EnergyStar Level	7	7			
ePEAT Level	Bronze	Silver			
Main Warranty	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)			
Battery Warranty	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement			
Mouse (Touchpad / Touchstick)		Touchscreen			
Keyboard Type (Phys./Virt./# keys)		82 Virtual			
RAM Maximum		16GB non-ECC			
Media Card Slots		MicroSD			
USB Ports - Rear (2.0 / 3.0 / C)		3.1 (1) / C (1)			
Maximum Supported Video Resolution		1920 x 1080			
Serial Port (9pin, 16550)					
VGA Out					
HDMI Out					
DisplayPort Out		1			
Headphone/Speaker Line Out		1			
Accelerometer		Yes			
GPS position		Yes			
e-Compass		Yes			
Gyro		Yes			
Battery Type (Cell)		2 Cell			
Expected Battery life (Hours)		7.25			
Recharge Time (Hours)		1.5			
AC Adapter (Watts)		45			
Cable Lock Slot		Yes			
Acoustics (max. dB)		19.3			
Dimensions (inches W x D x H)		12.29 x 7.99 x 0.96			
UPGRADE OPTIONS (to be ordered at initial purchase)					
Display	FHD/Outdoor/Backlit/Security				
Display	FHD/Outdoor/Backlit/Security				
Display	FHD/Outdoor/Backlit/Security				
RAM	32GB non-ECC				
RAM	64GB non-ECC				
Solid State Drive	512GB PCIe non-OPAL	512GB PCIe non-OPAL			
Solid State Drive	1TB PCIe non-OPAL	1TB PCIe non-OPAL			
Solid State Drive	2TB PCIe non-OPAL	2TB PCIe non-OPAL			
Video Graphics	AMD / nVidia w/2GB				
Video Graphics	AMD / nVidia w/4GB				
Video Graphics	AMD / nVidia w/6GB				
Video Graphics	AMD / nVidia w/8GB				
Battery (Replacement)	Battery Replacement				
Battery (Replacement)	Battery Replacement				
Broadband (Built-in)	Gobi w/A-GPS				
Broadband (Built-in)	AT&T w/A-GPS	AT&T w/A-GPS			
Broadband (Built-in)	Verizon w/A-GPS	Verizon w/A-GPS			
Modem (Built-in)	56K v.92				
Security	3 Yr. Absolute Resilience	3 Yr. Absolute Resilience			
Security	4 Yr. Absolute Resilience	4 Yr. Absolute Resilience			
Security	5 Yr. Absolute Resilience	5 Yr. Absolute Resilience			
ACCESSORY OPTIONS (ordered at initial purchase or at a later time)					
Port Replicator	Port Replicator	Desktop Dock Latitude 12 Rugged			
Port Replicator	Port Replicator	I/O Module			
Port Replicator	Port Replicator	Rugged Display Port Desk Dock			
Display Adapter	USB to VGA	USB-C to VGA			
Display Adapter	USB to DisplayPort	USB-C to DisplayPort			
Display Adapter	USB to HDMI	USB-C to HDMI			
Display Adapter	miniDisplayPort to VGA				
Display Adapter	miniDisplayPort to DisplayPort	MiniDisplayPort to DisplayPort			
Display Adapter	miniDisplayPort to HDMI				
Display Adapter	DisplayPort to VGA	DisplayPort to VGA			
Display Adapter	DisplayPort to HDMI				
Display Adapter	HDMI to VGA	HDMI to VGA			
Display Adapter	Wireless				
Stand	Laptop/Monitor	Rotating Hand Strap			
Stand	Laptop/Monitor	Kickstand			
Stand	Laptop/Monitor	Rigid Handle			
Keyboard/Pen/Dock	External	Detachable Keyboard			
Keyboard/Pen/Dock	External	Passive Stylus			
Keyboard/Pen/Dock	External				
Keyboard/Pen/Dock	External				
Removable Storage	USB 8x DVD+/-RW	USB 8x DVD +/-RW			
Battery (Additional)	Battery Additional				
Battery (Additional)	Battery Additional				
Network Adapter	USB to Ethernet 10/100/1000	USB 3.0 to Ethernet			
Power (Additional)	AC Adapter	Slim Power Adapter - 65W Type-C			
Power (Additional)	Auto/Air Adapter	AC/DC Auto-Air Adapter 90W			
Lock Kit	Lock Kit	Lock Kit			
Case	Nylon/Neoprene	Carry Case			
Case	Leather				
Case	Ruggedized				
Case	Deluxe w/Wheels				

CONFIGURATION 3 12" CHROMEBOOK COMPARISON		 			
		Lenovo 100e Chromebook \$428.99	Dell Latitude 5400 Chrome \$958.04	HP No Offering No Offering	Microsoft No Offering No Offering
		Product Details	Product Details	Product Details	Product Details
Features	Base Specifications	Product Details	Product Details	Product Details	Product Details
Weight (lbs. including battery)	3	2.76	3		
Display Size	12 Inch FHD Wide Screen	11.6 Inch FHD Wide Screen	11.6 Inch FHD Touchscreen		
Processor	AMD / Intel Dual Core 1.10GHz	AMD 3015e 1.20GHz, 1M, 2 Core, 4 Thread	Intel Core i5 8265U 1.60GHz, 6M, 4 Core, 8 Thread		
BIOS Configuration	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive		
Operating System	Chrome	Chrome	Chrome		
RAM	4GB DDR3 non-ECC	4GB DDR4 non-ECC	4GB DDR4 non-ECC		
Hard Disk	32GB eMMC non-OPAL	32GB eMMC non-OPAL	64GB eMMC non-OPAL		
Removable Storage					
Video Graphics	HD Graphics	AMD Radeon Graphics	Intel HD Graphics 620		
Web Camera	Front IR	Front IR	Front IR		
Sound	High Definition Audio	High Definition Audio	High Definition Audio		
Network Interface					
Broadband Interface					
Wireless Interface	802.11 AC	802.11 AC	Intel 802.11 AC		
Bluetooth Interface	5	5	5		
Biometrics	Yes				
Security					
EnergyStar Level	7	8	7		
ePEAT Level	Bronze	Silver	Gold		
Main Warranty	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)		
Battery Warranty	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement		
Mouse (Touchpad / Touchstick)		Touchpad	Touchpad		
Keyboard Type (Phys./Virt./# keys)		86 Keys	82 Keys		
RAM Maximum		4GB non-ECC	32GB non-ECC		
Media Card Slots		MicroSD	SD Card Reader		
USB Ports - Rear (2.0 / 3.0 / C)		3.2 (2) / C (2)	3.1 (1) / C (1)		
Maximum Supported Video Resolution		1280 x 768	1920 x 1080		
Serial Port (9pin, 16550)					
VGA Out					
HDMI Out		1	1		
DisplayPort Out			1		
Headphone/Speaker Line Out		1	1		
Accelerometer		Yes			
GPS position		via WWAN			
e-Compass		Yes			
Gyro		Yes			
Battery Type (Cell)		3 Cell	3 Cell		
Expected Battery life (Hours)		8	16.5		
Recharge Time (Hours)		1.25	1.5		
AC Adapter (Watts)		65	65		
Cable Lock Slot		Yes	Y		
Acoustics (max. dB)		12	21.3		
Dimensions (inches W x D x H)		11.4 x 7.95 x 0.78	12.7 x 8.5 x 0.77		
UPGRADE OPTIONS (to be ordered at initial purchase)					
Display	FHD/Outdoor/Backlit/Security		FHD Touchscreen		
Display	FHD/Outdoor/Backlit/Security		Backlit Keyboard		
Display	FHD/Outdoor/Backlit/Security				
Operating System	Chrome Ent. Mgmt. 1Yr. Lic	Chrome Ent. Mgmt. 1Yr. Lic	Chrome Ent. Mgmt. 1Yr. Lic		
RAM	8GB non-ECC				
RAM	16GB non-ECC		16GB non-ECC		
RAM	32GB non-ECC		32GB non-ECC		
RAM	64GB non-ECC				
Solid State Drive	64GB eMMC non-OPAL				
Solid State Drive	64GB PCIe non-OPAL				
Solid State Drive	128GB PCIe non-OPAL		128GB PCIe non-OPAL		
Solid State Drive	256GB PCIe non-OPAL		256GB PCIe non-OPAL		
Solid State Drive	512GB PCIe non-OPAL		512GB PCIe non-OPAL		
Video Graphics	AMD / nVidia w/2GB				
Video Graphics	AMD / nVidia w/4GB				
Video Graphics	AMD / nVidia w/6GB				
Video Graphics	AMD / nVidia w/8GB				
Battery (Replacement)	Battery Replacement				
Battery (Replacement)	Battery Replacement				
Broadband (Built-in)	Gobi w/A-GPS	Gobi Fibocom NL 688-AM	Gobi w/A-GPS		
Broadband (Built-in)	AT&T w/A-GPS		AT&T w/A-GPS		
Broadband (Built-in)	Verizon w/A-GPS		Verizon w/A-GPS		
Modem (Built-in)	56K v.92				
Security	3 Yr. Absolute Resilience	3 Yr. Absolute Resilience	3 Yr. Absolute Resilience		
Security	4 Yr. Absolute Resilience	4 Yr. Absolute Resilience	4 Yr. Absolute Resilience		
Security	5 Yr. Absolute Resilience	5 Yr. Absolute Resilience	5 Yr. Absolute Resilience		
ACCESSORY OPTIONS (ordered at initial purchase or at a later time)					
Port Replicator	Port Replicator		Docking Station - WD19S 130W		
Port Replicator	Port Replicator				
Port Replicator	Port Replicator				
Display Adapter	USB to VGA		USB-C to VGA		
Display Adapter	USB to DisplayPort		USB-C to DisplayPort		
Display Adapter	USB to HDMI		USB-C to HDMI		
Display Adapter	miniDisplayPort to VGA				
Display Adapter	miniDisplayPort to DisplayPort		MiniDisplayPort to DisplayPort		
Display Adapter	miniDisplayPort to HDMI				
Display Adapter	DisplayPort to VGA		DisplayPort to VGA		
Display Adapter	DisplayPort to HDMI				
Display Adapter	HDMI to VGA		HDMI to VGA		
Display Adapter	Wireless				
Stand	Laptop/Monitor				
Stand	Laptop/Monitor				
Stand	Laptop/Monitor				
Keyboard/Pen/Dock	External		Pro Wireless Keyboard & Mouse		
Keyboard/Pen/Dock	External		Premier Wireless Keyboard & Mouse		
Keyboard/Pen/Dock	External		USB-C Mobile Adapter		
Keyboard/Pen/Dock	External		Active Pen - PN579X		
Removable Storage	USB 8x DVD+-RW		USB 8x DVD+-RW		
Battery (Additional)	Battery Additional		4 Cell 68Whr		
Battery (Additional)	Battery Additional		3 Cell 51 Whr		
Network Adapter	USB to Ethernet 10/100/1000	USB-C to Ethernet	USB 3.0 to Ethernet		
Power (Additional)	AC Adapter	USB-C AC Adapter 45W	Slim Power Adapter - 65W Type-C		
Power (Additional)	Auto/Air Adapter		AC/DC Auto-Air Adapter 90W		
Lock Kit	Lock Kit		Lock Kit		
Case	Nylon/Neoprene	ThinkPad Basic Top load	Pro Briefcase 14		
Case	Leather				
Case	Ruggedized				
Case	Deluxe w/Wheels				

CONFIGURATION 4 12" CONVERTIBLE BUSINESS LAPTOP COMPARISON



Microsoft Surface Laptop Go	\$1,147.20
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Dell Latitude 5330 2-in-1	\$1,460.66
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Lenovo ThinkPad L13 Yoga Gen 3	\$1,466.99
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HP EliteBook x360 830 G9 \$1,485.00

Features	Base Specifications	Product Details	Product Details	Product Details	Product Details
Weight (lbs. including battery)	4	2.45	2.9	2.9	2.9
Display Size	12 inch FHD Touchscreen	12.4 Inch FHD Touchscreen	13.3 Inch FHD Touchscreen	13.3 Inch FHD Touchscreen	13.3 Inch WUXGA Touchscreen
Processor	Intel Core i5 1245U 1.60GHz, 12M, 10 Core, 12 Thread	Intel Core i5 1035G1 1.0GHz, 6M, 4 Core, 8 Thread	Intel Core i5 1245U 1.60GHz, 12M, 10 Core, 12 Thread	Intel Core i5 1245U 1.60GHz, 12M, 10 Core, 12 Thread	Intel Core i5 1245U 1.60GHz, 12M, 10 Core, 12 Thread
BIOS Configuration	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive
Operating System	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit
RAM	16GB DDR4 non-ECC	16GB DDR4 non-ECC	16GB DDR4 non-ECC	16GB DDR3 non-ECC	16GB DDR4 non-ECC
Hard Disk	256GB PCIe non-OPAL	256GB PCIe non-OPAL	256GB PCIe non-OPAL	256GB PCIe non-OPAL	256GB PCIe non-OPAL
Removable Storage					
Video Graphics	Intel Iris Xe Graphics	Intel UHD Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics
Web Camera	Front IR	Front IR	Front IR	Front IR	Front IR
Sound	High Definition Audio	Dolby Audio	High Definition Audio	High Definition Audio	Bang & Olufsen
Network Interface					
Broadband Interface					
Wireless Interface	802.11 AX	802.11 AX	Intel 802.11 AX	Intel 802.11 AX	Intel 802.11 AX
Bluetooth Interface	5	5	5	5	5.2
Biometrics	Yes	Yes	Yes		Yes
Security	Intel vPro		Intel vPro	Intel vPro	Intel vPro
EnergyStar Level	7	8	7	8	8
ePEAT Level	Bronze	Gold	Gold	Silver	Gold
Main Warranty	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Replacement (Accidental Damage)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)
Battery Warranty	3 Year, 1 Time Replacement	4 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement
Mouse (Touchpad / Touchstick)		Touchpad	Touchscreen / Touchpad	Touchpad	Touchscreen / Touchpad
Keyboard Type (Phys./Virt./# keys)		79 Keys	82 Keys	86 Keys	83 Keys
RAM Maximum		16GB non-ECC	32GB non-ECC	32GB non-ECC	32GB non-ECC
Media Card Slots			UltraSD	MicroSD	UltraSD
USB Ports - Rear (2.0 / 3.0 / C)		3.0 (1) / C (1)	3.2 (2) / C (2)	3.2 (2) / C (1)	3.1 (2) / C (2)
Maximum Supported Video Resolution		4096 x 2304	1920 x 1080	3840 x 2640	3840 x 2160
Serial Port (9pin, 16550)					
VGA Out					
HDMI Out			1	1	1
DisplayPort Out			1		
Headphone/Speaker Line Out					
Accelerometer		1	1	1	1
GPS position	Yes			Yes	Yes
e-Compass				via WWAN	via WWAN
Gyro				Yes	Yes
Battery Type (Cell)		4 Cell	3 Cell	4 Cell	3 Cell
Expected Battery life (Hours)		13	12	8	22
Recharge Time (Hours)		2.5	1.25	1.25	1
AC Adapter (Watts)		39	65	65	65
Cable Lock Slot			Yes	Yes	Yes
Acoustics (max. dB)		32	20.2	20	2.6
Dimensions (inches W x D x H)		10.95 x 8.10 x 0.62	12.04 x 8.17 x 0.67	12.26 x 8.62 x 0.69	11.81 x 8.51 x 0.76

UPGRADE OPTIONS (to be ordered at initial purchase)

Display	FHD/Outdoor/Backlit/Security		Backlight Keyboard	ePrivacy Screen	SureView Privacy Screen/Keyboard
Display	FHD/Outdoor/Backlit/Security				400Nits WUXGA Touchscreen
Display	FHD/Outdoor/Backlit/Security				
RAM	32GB non-ECC		32GB non-ECC	32GB non-ECC	
RAM	64GB non-ECC				
Solid State Drive	512GB PCIe non-OPAL		512GB PCIe non-OPAL	512GB PCIe non-OPAL	512GB PCIe non-OPAL
Solid State Drive	1TB PCIe non-OPAL		1TB PCIe non-OPAL	1TB PCIe non-OPAL	1TB PCIe non-OPAL
Solid State Drive	2TB PCIe non-OPAL		2TB PCIe non-OPAL		2TB PCIe non-OPAL
Video Graphics	AMD / nVidia w/2GB				
Video Graphics	AMD / nVidia w/4GB				
Video Graphics	AMD / nVidia w/6GB				
Video Graphics	AMD / nVidia w/8GB				
Battery (Replacement)	Battery Replacement				
Battery (Replacement)	Battery Replacement				
Broadband (Built-in)	Gobi w/A-GPS		Gobi w/A-GPS	Gobi Qualcomm X55 LTE	
Broadband (Built-in)	AT&T w/A-GPS		AT&T w/A-GPS		Intel XMM 7560R+ LTE-Adv. Pro AT&T
Broadband (Built-in)	Verizon w/A-GPS		Verizon w/A-GPS		Intel XMM 7560R+ LTE-Adv. Pro Verizon
Modem (Built-in)	56K v.92				
Security	3 Yr. Absolute Resilience		3 Yr. Absolute Resilience	3 Yr. Absolute Resilience	3 Yr. Absolute Resilience
Security	4 Yr. Absolute Resilience		4 Yr. Absolute Resilience	4 Yr. Absolute Resilience	4 Yr. Absolute Resilience
Security	5 Yr. Absolute Resilience		5 Yr. Absolute Resilience	5 Yr. Absolute Resilience	5 Yr. Absolute Resilience

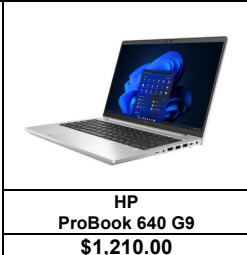
ACCESSORY OPTIONS (ordered at initial purchase or at a later time)

Port Replicator	Port Replicator	Surface Dock 2	Docking Station - WD19S 130W	USB-C Docking Station	USB-C Dock G5
Port Replicator	Port Replicator			USB-C Mini Dock	Mini Travel Dock
Port Replicator	Port Replicator			Thunderbolt Docking Station	Travel Hub G2
Display Adapter	USB to VGA	USB-C to VGA	USB-C to VGA	USB-C to VGA	USB-C to VGA
Display Adapter	USB to DisplayPort	USB-C to DisplayPort	USB-C to DisplayPort	USB-C to DisplayPort	USB-C to DisplayPort
Display Adapter	USB to HDMI	USB-C to HDMI	USB-C to HDMI	USB-C to HDMI	USB-C to HDMI
Display Adapter	miniDisplayPort to VGA				
Display Adapter	miniDisplayPort to DisplayPort		MiniDisplayPort to DisplayPort		
Display Adapter	miniDisplayPort to HDMI				
Display Adapter	DisplayPort to VGA		DisplayPort to VGA		
Display Adapter	DisplayPort to HDMI				
Display Adapter	HDMI to VGA		HDMI to VGA		HDMI to VGA
Display Adapter	Wireless	Wireless Display Adapter			
Stand	Laptop/Monitor			Adjustable Notebook Stand	
Stand	Laptop/Monitor			2-in-1 Laptop Stand	
Stand	Laptop/Monitor				
Keyboard/Pen/Dock	External		Pro Wireless Keyboard & Mouse	Pen Pro	Thunderbolt Dock G2 120W
Keyboard/Pen/Dock	External		Premier Wireless Keyboard & Mouse	External USB Keyboard	Thunderbolt Dock G2 120W w/Audio Module
Keyboard/Pen/Dock	External		USB-C Mobile Adapter	External USB Mouse	Rechargeable Active Pen G3
Keyboard/Pen/Dock	External		Active Pen - PN579X	External USB-C Mouse	
Removable Storage	USB 8x DVD+/-RW		USB 8x DVD+/-RW	USB 8x DVD+/-RW	USB 8x DVD+/-RW
Battery (Additional)	Battery Additional		3 Cell 41Whr	Go USB-C Laptop Power Bank	
Battery (Additional)	Battery Additional		4 Cell 58Whr		
Network Adapter	USB to Ethernet 10/100/1000	USB-C to Ethernet	USB 3.0 to Ethernet	USB-C to Ethernet	USB-C to Ethernet
Power (Additional)	AC Adapter	Surface 65W Power Supply	Slim Power Adapter - 65W Type-C	USB-C Portable AC Adapter 45W	USB-C Power Adapter 65W
Power (Additional)	Auto/Air Adapter		AC/DC Auto-Air Adapter 90W	USB-C DC Travel Adapter 65W	
Lock Kit	Lock Kit		Lock Kit	NanoSaver Cable Lock	Nano Master Keyed Lock
Case	Nylon/Neoprene		Pro Briefcase 14	ThinkPad Basic Top load	14.1 Business Case
Case	Leather		Premier Sleeve 13	Professional 15.6 Top load Case	
Case	Ruggedized				
Case	Deluxe w/Wheels				

CONFIGURATION 7 12" 2-IN-1 PERFORMANCE TABLET COMPARISON					
		Microsoft Surface Pro 8 \$1,690.65	Dell Latitude 7330 2-in-1 \$1,839.84	Lenovo ThinkPad X13 Yoga Gen 3 \$1,857.99	HP No Offering No Offering
		Product Details	Product Details	Product Details	Product Details
Features	Base Specifications	Product Details	Product Details	Product Details	Product Details
Weight (lbs. including battery)	3	1.96	3.06	2.65	
Display Size	12 Inch FHD Touchscreen	13 inch FHD Touchscreen	13.3 Inch FHD Touchscreen	13.3 Inch FHD Touchscreen	
Processor	Intel Core i7 1265U 1.80GHz, 12M, 10 Core, 12 Thread	Intel Core i7 1185G7 3.0GHz, 12M, 4 Core, 8 Thread	Intel Core i7 1265U 1.80GHz, 12M, 10 Core, 12 Thread	Intel Core i7 1265U 1.80GHz, 12M, 10 Core, 12 Thread	
BIOS Configuration	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	
Operating System	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	
RAM	16GB DDR4 non-ECC	16GB DDR4 non-ECC	16GB DDR4 non-ECC	16GB DDR4 non-ECC	
Hard Disk	512GB PCIe non-OPAL	512GB PCIe non-OPAL	512GB PCIe non-OPAL	512GB PCIe non-OPAL	
Removable Storage					
Video Graphics	AMD / nVidia w/2GB	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	
Web Camera	Front IR	Front IR	Front IR	Front IR	
Sound	High Definition Audio	Dolby Audio	High Definition Audio	High Definition Audio	
Network Interface					
Broadband Interface					
Wireless Interface	802.11 AX	802.11 AX	Intel 802.11 AX	Intel 802.11 AX	
Bluetooth Interface	5	5	5	5	
Biometrics	Yes		Yes		
Security	Intel vPro		Intel vPro	Intel vPro	
EnergyStar Level	7	8	7	8	
ePEAT Level	Bronze	Gold	Gold	Silver	
Main Warranty	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Replacement (Accidental Damage)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	
Battery Warranty	3 Year, 1 Time Replacement	4 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	
Mouse (Touchpad / Touchstick)		Touchscreen	Touchscreen / Touchpad	Touchpad	
Keyboard Type (Phys./Virt./# keys)		Virtual	79 Keys	86 Keys	
RAM Maximum		32GB non-ECC	32GB non-ECC	32GB non-ECC	
Media Card Slots			UltraSD	MicroSD	
USB Ports - Rear (2.0 / 3.0 / C)		C (2)	3.2 (1) / C (2)	3.2 (2) / C (1)	
Maximum Supported Video Resolution		7860 x 4320	1920 x 1080	3840 x 2640	
Serial Port (9pin, 16550)					
VGA Out					
HDMI Out			1	1	
DisplayPort Out			1		
Headphone/Speaker Line Out		1	1	1	
Accelerometer		Yes		Yes	
GPS position		Yes		via WWAN	
e-Compass		0		Yes	
Gyro		Yes		Yes	
Battery Type (Cell)		4 Cell	3 Cell	4 Cell	
Expected Battery life (Hours)		16	11.5	8	
Recharge Time (Hours)		1.5	1.25	1.25	
AC Adapter (Watts)		65	65	65	
Cable Lock Slot			Yes	Yes	
Acoustics (max. dB)		40	22.6	20	
Dimensions (inches W x D x H)		11.3 x 8.2 x 0.37	12.07 x 7.87 x 0.67	12.0 x 8.42 x 0.61	
UPGRADE OPTIONS (to be ordered at initial purchase)					
Display	FHD/Outdoor/Backlit/Security		Backlight Keyboard	ePrivacy Screen	
Display	FHD/Outdoor/Backlit/Security				
Display	FHD/Outdoor/Backlit/Security				
RAM	32GB non-ECC	32GB non-ECC / 1TB PCIe non-OPAL	32GB non-ECC	32GB non-ECC	
RAM	64GB non-ECC				
Solid State Drive	1TB PCIe non-OPAL	1TB PCIe non-OPAL	1TB PCIe non-OPAL	1TB PCIe non-OPAL	
Solid State Drive	2TB PCIe non-OPAL				
Video Graphics	AMD / nVidia w/4GB				
Video Graphics	AMD / nVidia w/6GB				
Video Graphics	AMD / nVidia w/8GB				
Battery (Replacement)	Battery Replacement				
Battery (Replacement)	Battery Replacement				
Broadband (Built-in)	Gobi w/A-GPS		Gobi w/A-GPS	Gobi Qualcomm X55 LTE	
Broadband (Built-in)	AT&T w/A-GPS		AT&T w/A-GPS		
Broadband (Built-in)	Verizon w/A-GPS		Verizon w/A-GPS		
Modem (Built-in)	56K v.92				
Security	3 Yr. Absolute Resilience		3 Yr. Absolute Resilience	3 Yr. Absolute Resilience	
Security	4 Yr. Absolute Resilience		4 Yr. Absolute Resilience	4 Yr. Absolute Resilience	
Security	5 Yr. Absolute Resilience		5 Yr. Absolute Resilience	5 Yr. Absolute Resilience	
ACCESSORY OPTIONS (ordered at initial purchase or at a later time)					
Port Replicator	Port Replicator	Surface Dock 2	Docking Station - WD19S 130W	USB-C Docking Station	
Port Replicator	Port Replicator			USB-C Mini Dock	
Port Replicator	Port Replicator			Thunderbolt Docking Station	
Display Adapter	USB to VGA	USB-C to VGA	USB-C to VGA	USB-C to VGA	
Display Adapter	USB to DisplayPort	USB-C to DisplayPort	USB-C to DisplayPort	USB-C to DisplayPort	
Display Adapter	USB to HDMI	USB-C to HDMI	USB-C to HDMI	USB-C to HDMI	
Display Adapter	miniDisplayPort to VGA				
Display Adapter	miniDisplayPort to DisplayPort		MiniDisplayPort to DisplayPort		
Display Adapter	miniDisplayPort to HDMI				
Display Adapter	DisplayPort to VGA		DisplayPort to VGA		
Display Adapter	DisplayPort to HDMI				
Display Adapter	HDMI to VGA		HDMI to VGA		
Display Adapter	Wireless	Wireless Display Adapter			
Stand	Laptop/Monitor			Adjustable Notebook Stand	
Stand	Laptop/Monitor			2-in-1 Laptop Stand	
Stand	Laptop/Monitor				
Keyboard/Pen/Dock	External	Surface Pro Keyboard	Pro Wireless Keyboard & Mouse	Pen Pro	
Keyboard/Pen/Dock	External	Surface Slim Pen 2	Premier Wireless Keyboard & Mouse	External USB Keyboard	
Keyboard/Pen/Dock	External	Surface Pro Sig. Keyboard w/Slim Pen 2		External USB Mouse	
Keyboard/Pen/Dock	External			External USB-C Mouse	
Removable Storage	USB 8x DVD+/-RW		USB 8x DVD+/-RW	USB 8x DVD+/-RW	
Battery (Additional)	Battery Additional			Go USB-C Laptop Power Bank	
Battery (Additional)	Battery Additional				
Network Adapter	USB to Ethernet 10/100/1000	USB-C to Ethernet	USB 3.0 to Ethernet	USB-C to Ethernet	
Power (Additional)	AC Adapter	Surface 65W Power Supply		USB-C Portable AC Adapter 45W	
Power (Additional)	Auto/Air Adapter			USB-C DC Travel Adapter 65W	
Lock Kit	Lock Kit			NanoSaver Cable Lock	
Case	Nylon/Neoprene		Pro Briefcase 14	ThinkPad Basic Top load	
Case	Leather			Professional 15.6 Top load Case	
Case	Ruggedized				
Case	Deluxe w/Wheels				

CONFIGURATION 8 14" CHROMEBOOK COMPARISON					
		HP Pro c640 G2 Chromebook \$1,010.00	Lenovo 14e Chromebook \$1,099.99	Dell Latitude 5400 Chrome \$1,145.37	Microsoft No Offering No Offering
		Product Details	Product Details	Product Details	Product Details
Features	Base Specifications				
Weight (lbs. including battery)	3.5	3.35	3.5	3.24	
Display Size	14 Inch FHD Wide Screen	14 Inch FHD Wide Screen	14 Inch FHD Wide Screen	14 Inch FHD Wide Screen	
Processor	AMD / Intel Quad Core 1.10GHz	Intel Core i5 1135G7 2.40GHz, 8M, 4 Core, 8 Thread	AMD 3015e 1.20GHz, 1M, 2 Core, 4 Thread	Intel Core i7 8665U 1.90GHz, 8M, 4 Core, 8 Thread	
BIOS Configuration	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	
Operating System	Chrome	Chrome	Chrome	Chrome	
RAM	8GB DDR3 non-ECC	16GB DDR3 non-ECC	8GB DDR4 non-ECC	8GB DDR4 non-ECC	
Hard Disk	64GB eMMC non-OPAL	64GB PCIe non-OPAL	64GB eMMC non-OPAL	64GB PCIe non-OPAL	
Removable Storage					
Video Graphics	HD Graphics	Intel Iris Xe Graphics	AMD Radeon R4	Intel UHD Graphics 620	
Web Camera	Front IR	Front IR	0	Front IR	
Sound	High Definition Audio	Bang & Olufsen	High Definition Audio	High Definition Audio	
Network Interface					
Broadband Interface					
Wireless Interface	802.11 AX	Intel 802.11 AX	802.11 AC	Intel 802.11 AX	
Bluetooth Interface	5	5	5	5	
Biometrics	Yes			Yes	
Security	Intel vPro			Intel vPro	
EnergyStar Level	7	7	8	7	
ePEAT Level	Bronze	Gold	Silver	Gold	
Main Warranty	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	
Battery Warranty	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	
Mouse (Touchpad / Touchstick)		Touchpad	Touchpad	Touchpad	
Keyboard Type (Phys./Virt./# keys)		77 Keys	86 Keys	81 Keys	
RAM Maximum		16GB non-ECC	8GB non-ECC	32GB non-ECC	
Media Card Slots		MicroSD	MicroSD	SD Card Reader	
USB Ports - Rear (2.0 / 3.0 / C)		3.1 (2) / C (2)	3.2 (2) / C (1)	3.1 (3) / C (1)	
Maximum Supported Video Resolution		1920 x 1080	1920 x 1080	1920 x 1080	
Serial Port (9pin, 16550)					
VGA Out					
HDMI Out		1	1	1	
DisplayPort Out				1	
Headphone/Speaker Line Out		1	1	1	
Accelerometer			Yes		
GPS position			via WWAN		
e-Compass			Yes		
Gyro			Yes		
Battery Type (Cell)		3 Cell	3 Cell	3 Cell	
Expected Battery life (Hours)		12	8	16.25	
Recharge Time (Hours)		1	1.25	1.5	
AC Adapter (Watts)		65	65	65	
Cable Lock Slot		Yes	Yes	Yes	
Acoustics (max. dB)		2.7	12	21.3	
Dimensions (inches W x D x H)		12.8 x 8.07 x 0.65	12.91 x 8.86 x 0.70	12.7 x 8.5 x 0.77	
UPGRADE OPTIONS (to be added at initial purchase)					
Display	FHD/Outdoor/Backlit/Security			FHD Touchscreen	
Display	FHD/Outdoor/Backlit/Security			Backlit Keyboard	
Display	FHD/Outdoor/Backlit/Security				
Operating System	Chrome Ent. Mgmt. 1Yr. Lic	Chrome Ent. Mgmt. Perpetual	Chrome Ent. Mgmt. 1Yr. Lic	Chrome Ent. Mgmt. 1Yr. Lic	
RAM	16GB non-ECC			16GB non-ECC	
RAM	32GB non-ECC			32GB non-ECC	
RAM	64GB non-ECC				
Solid State Drive	128GB PCIe non-OPAL			128GB PCIe non-OPAL	
Solid State Drive	256GB PCIe non-OPAL			256GB PCIe non-OPAL	
Solid State Drive	512GB PCIe non-OPAL			512GB PCIe non-OPAL	
Video Graphics	AMD / nVidia w/2GB				
Video Graphics	AMD / nVidia w/4GB				
Video Graphics	AMD / nVidia w/6GB				
Video Graphics	AMD / nVidia w/8GB				
Battery (Replacement)	Battery Replacement				
Battery (Replacement)	Battery Replacement				
Broadband (Built-in)	Gobi w/A-GPS			Gobi w/A-GPS	
Broadband (Built-in)	AT&T w/A-GPS			AT&T w/A-GPS	
Broadband (Built-in)	Verizon w/A-GPS			Verizon w/A-GPS	
Modem (Built-in)	56K v.92				
Security	3 Yr. Absolute Resilience	3 Yr. Absolute Resilience	3 Yr. Absolute Resilience	3 Yr. Absolute Resilience	
Security	4 Yr. Absolute Resilience	4 Yr. Absolute Resilience	4 Yr. Absolute Resilience	4 Yr. Absolute Resilience	
Security	5 Yr. Absolute Resilience	5 Yr. Absolute Resilience	5 Yr. Absolute Resilience	5 Yr. Absolute Resilience	
ACCESSORY OPTIONS (added at initial purchase)					
Port Replicator	Port Replicator	USB-C Universal Dock G2		Docking Station - WD19S 130W	
Port Replicator	Port Replicator	USB-C Mini Dock			
Port Replicator	Port Replicator				
Display Adapter	USB to VGA	USB-C to VGA		USB-C to VGA	
Display Adapter	USB to DisplayPort	USB-C to DisplayPort		USB-C to DisplayPort	
Display Adapter	USB to HDMI	USB-C to HDMI		USB-C to HDMI	
Display Adapter	miniDisplayPort to VGA				
Display Adapter	miniDisplayPort to DisplayPort			MiniDisplayPort to DisplayPort	
Display Adapter	miniDisplayPort to HDMI				
Display Adapter	DisplayPort to VGA			DisplayPort to VGA	
Display Adapter	DisplayPort to HDMI				
Display Adapter	HDMI to VGA	HDMI to VGA		HDMI to VGA	
Display Adapter	Wireless				
Stand	Laptop/Monitor				
Stand	Laptop/Monitor				
Stand	Laptop/Monitor				
Keyboard/Pen/Dock	External			Pro Wireless Keyboard & Mouse	
Keyboard/Pen/Dock	External			Premier Wireless Keyboard & Mouse	
Keyboard/Pen/Dock	External			USB-C Mobile Adapter	
Keyboard/Pen/Dock	External				
Removable Storage	USB 8x DVD+/-RW	USB 8x DVD+/-RW		USB 8x DVD+/-RW	
Battery (Additional)	Battery Additional			3 Cell 42Whr	
Battery (Additional)	Battery Additional			4 Cell 68Whr	
Network Adapter	USB to Ethernet 10/100/1000	USB to Ethernet	USB-C to Ethernet	USB 3.0 to Ethernet	
Power (Additional)	AC Adapter	USB-C Power Adapter 65W	USB-C AC Adapter 45W	Slim Power Adapter - 65W Type-C	
Power (Additional)	Auto/Air Adapter			AC/DC Auto-Air Adapter 90W	
Lock Kit	Lock Kit	Nano Single Key Lock		Lock Kit	
Case	Nylon/Neoprene	14.1 Inch Business Case	ThinkPad Basic Top load	Pro Briefcase 14	
Case	Leather	Prelude Pro 15.6 Top Load		Pro Slim Briefcase 15	
Case	Ruggedized				
Case	Deluxe w/Wheels				

CONFIGURATION 9 14" BUSINESS LAPTOP COMPARISON



Product Details
3.03
14 Inch FHD Wide Screen
Intel Core i5 1245U
1.60GHz, 12M, 10 Core, 12 Thread

Product Details
3.06
14 Inch FHD Wide Screen
Intel Core i5 1245U
1.60GHz, 12M, 10 Core, 12 Thread

Product Details
2.84
13.5 Inch FHD Touchscreen
Intel Core i5 1145G7
2.60GHz, 8M, 4 Core, 8 Thread

Product Details	
3.03	
14 Inch FHD Wide Screen	
Intel Core i5 1245U	
1.60GHz, 12M, 10 Core, 12 Thread	

Features	Base Specifications	Product Details	Product Details	Product Details	Product Details
Weight (lbs. including battery)	3.5	3.03	3.06	2.84	3.03
Display Size	14 inch FHD Wide Screen	14 Inch FHD Wide Screen	14 Inch FHD Wide Screen	13.5 inch FHD Touchscreen	14 Inch FHD Wide Screen
Processor	Intel Core i5 1245U 1.60GHz, 12M, 10 Core, 12 Thread	Intel Core i5 1245U 1.60GHz, 12M, 10 Core, 12 Thread	Intel Core i5 1245U 1.60GHz, 12M, 10 Core, 12 Thread	Intel Core i5 1145G7 2.60GHz, 8M, 4 Core, 8 Thread	Intel Core i5 1245U 1.60GHz, 12M, 10 Core, 12 Thread
BIOS Configuration	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive
Operating System	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit
RAM	16GB DDR4 non-ECC	16GB DDR4 non-ECC	16GB DDR3 non-ECC	16GB DDR4 non-ECC	16GB DDR4 non-ECC
Hard Disk	256GB PCIe non-OPAL	256GB PCIe non-OPAL	256GB PCIe non-OPAL	256GB PCIe non-OPAL	256GB PCIe non-OPAL
Removable Storage					
Video Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics
Web Camera	Front IR	Front IR	Front IR	Front IR	Front IR
Sound	High Definition Audio	Bang & Olufsen	High Definition Audio	Dolby Atmos	High Definition Audio
Network Interface					
Broadband Interface					
Wireless Interface	802.11 AX	Intel 802.11 AX	Intel 802.11 AX	802.11 AX	Intel 802.11 AX
Bluetooth Interface	5	5	5.2	5	5
Biometrics	Yes	Yes	Yes		Yes
Security	Intel vPro	Intel vPro	Intel vPro	Intel vPro	Intel vPro
EnergyStar Level	7	8	8	8	8
ePEAT Level	Bronze	Gold	Silver	Gold	Gold
Main Warranty	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Replacement (Accidental Damage)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)
Battery Warranty	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	4 Year, 1 Time Replacement	3 Year, 1 Time Replacement
Mouse (Touchpad / Touchstick)		Touchpad	Touchpad	Touchscreen / Trackpad	Touchpad
Keyboard Type (Phys./Virt./# keys)		85 Keys	86 Keys	86 Keys	79 Keys
RAM Maximum		64GB non-ECC	64GB non-ECC	32GB non-ECC	64GB non-ECC
Media Card Slots			MicroSD		UltraSD
USB Ports - Rear (2.0 / 3.0 / C)		3.1 (3) / C (1)	3.2 (2) / C (1)	3.0 (1) / C (1)	3.2 (2) / C (2)
Maximum Supported Video Resolution		1920 x 1080	3840 x 2840	5120 x 2880	1920 x 1080
Serial Port (9pin, 16550)					
VGA Out					
HDMI Out		1	1		1
DisplayPort Out					1
Headphone/Speaker Line Out					
Accelerometer			Yes	1	1
GPS position			Yes	Yes	
e-Compass			via WWAN		
Gyro			Yes		
Battery Type (Cell)		3 Cell	3 Cell	10 Cell	3 Cell
Expected Battery life (Hours)		15	8	16.5	13.25
Recharge Time (Hours)		1	1.25	2.5	1.25
AC Adapter (Watts)		65	45	65	65
Cable Lock Slot		Yes	Yes		Yes
Acoustics (max. dB)		4.2	20	35	22.1
Dimensions (inches W x D x H)		11.81 x 8.51 x 0.76	13.03 x 9.25 x 0.75	12.1 x 8.8 x 0.57	12.65 x 8.35 x 0.76

UPGRADE OPTIONS (to be ordered at initial purchase)

Display	FHD/Outdoor/Backlit/Security	SureView Privacy Screen/Keyboard	FHD 400Nits Widescreen	FHD Touchscreen
Display	FHD/Outdoor/Backlit/Security	Touchscreen	FHD Touchscreen	14 inch Portable Monitor
Display	FHD/Outdoor/Backlit/Security	400Nits FHD Wide Screen		Backlit Keyboard
RAM	32GB non-ECC	32GB non-ECC	32GB non-ECC	32GB non-ECC
RAM	64GB non-ECC	64GB non-ECC		64GB non-ECC
Solid State Drive	512GB PCIe non-OPAL	512GB PCIe non-OPAL	512GB PCIe non-OPAL	512GB PCIe non-OPAL
Solid State Drive	1TB PCIe non-OPAL	1TB PCIe non-OPAL	1TB PCIe non-OPAL	1TB PCIe non-OPAL
Solid State Drive	2TB PCIe non-OPAL			2TB PCIe non-OPAL
Video Graphics	AMD / nVidia w/2GB		nVidia GeForce MX550 w/2GB	
Video Graphics	AMD / nVidia w/4GB			
Video Graphics	AMD / nVidia w/6GB			
Video Graphics	AMD / nVidia w/8GB			
Battery (Replacement)	Battery Replacement		57Whr Battery	
Battery (Replacement)	Battery Replacement		63Whr Battery	
Broadband (Built-in)	Gobi w/A-GPS		Gobi Qualcomm X55 LTE	Gobi w/A-GPS
Broadband (Built-in)	AT&T w/A-GPS	Intel XMM 7560R+ LTE-Adv. Pro AT&T		AT&T w/A-GPS
Broadband (Built-in)	Verizon w/A-GPS	Intel XMM 7560R+ LTE-Adv. Pro Verizon		Verizon w/A-GPS
Modem (Built-in)	56K v.92			
Security	3 Yr. Absolute Resilience	3 Yr. Absolute Resilience	3 Yr. Absolute Resilience	3 Yr. Absolute Resilience
Security	4 Yr. Absolute Resilience	4 Yr. Absolute Resilience	4 Yr. Absolute Resilience	4 Yr. Absolute Resilience
Security	5 Yr. Absolute Resilience	5 Yr. Absolute Resilience	5 Yr. Absolute Resilience	5 Yr. Absolute Resilience

ACCESSORY OPTIONS (ordered at initial purchase or at a later time)

Port Replicator	Port Replicator	USB-C Dock G5	USB-C Docking Station	Surface Dock 2	Docking Station - WD19S 130W
Port Replicator	Port Replicator	Mini Travel Dock	USB-C Mini Dock		
Port Replicator	Port Replicator	Travel Hub G2	Thunderbolt Docking Station		
Display Adapter	USB to VGA	USB-C to VGA	USB-C to VGA	USB-C to VGA	USB-C to VGA
Display Adapter	USB to DisplayPort	USB-C to DisplayPort	USB-C to DisplayPort	USB-C to DisplayPort	USB-C to DisplayPort
Display Adapter	USB to HDMI	USB-C to HDMI	USB-C to HDMI	USB-C to HDMI	USB-C to HDMI
Display Adapter	miniDisplayPort to VGA				
Display Adapter	miniDisplayPort to DisplayPort				MiniDisplayPort to DisplayPort
Display Adapter	miniDisplayPort to HDMI				
Display Adapter	DisplayPort to VGA				DisplayPort to VGA
Display Adapter	DisplayPort to HDMI				
Display Adapter	HDMI to VGA	HDMI to VGA			HDMI to VGA
Display Adapter	Wireless			Wireless Display Adapter	
Stand	Laptop/Monitor		Adjustable Notebook Stand		
Stand	Laptop/Monitor		2-in-1 Laptop Stand		
Stand	Laptop/Monitor				
Keyboard/Pen/Dock	External	Thunderbolt Dock G2 120W	Pen Pro	Surface Pen - Silver	Pro Wireless Keyboard & Mouse
Keyboard/Pen/Dock	External	Thunderbolt Dock G2 120W w/Audio Module	External USB Keyboard		Premier Wireless Keyboard & Mouse
Keyboard/Pen/Dock	External	Rechargeable Active Pen G3	External USB Mouse		USB-C Mobile Adapter
Keyboard/Pen/Dock	External		External USB-C Mouse		
Removable Storage	USB 8x DVD+/-RW	USB 8x DVD+/-RW	USB 8x DVD+/-RW		USB 8x DVD+/-RW
Battery (Additional)	Battery Additional		Go USB-C Laptop Power Bank		3 Cell 41Whr
Battery (Additional)	Battery Additional				4 Cell 58Whr
Network Adapter	USB to Ethernet 10/100/1000	USB-C to Ethernet	USB-C to Ethernet	USB-C to Ethernet	USB 3.0 to Ethernet
Power (Additional)	AC Adapter	USB-C Power Adapter 65W	USB-C Portable AC Adapter 45W	Surface 65W Power Supply	Slim Power Adapter - 65W Type-C
Power (Additional)	Auto/Air Adapter		USB-C DC Travel Adapter 65W		AC/DC Auto-Air Adapter 90W
Lock Kit	Lock Kit	Nano Master Keyed Lock	NanoSaver Cable Lock		Lock Kit
Case	Nylon/Neoprene	15.6 Business Top Load	ThinkPad Basic Top load		Pro Briefcase 14
Case	Leather	Prelude Pro 15.6 Top Load	Professional 15.6 Top load Case		Pro Slim Briefcase 15
Case	Ruggedized				Premier Briefcase 15
Case	Deluxe w/Wheels				

CONFIGURATION 13 14" SEMI-RUGGED LAPTOP (MIL-STD-810G COMPLIANT) COMPARISON



Lenovo ThinkPad T14 Gen 3 \$1,433.99
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Dell Latitude 5430 Rugged	\$2,107.82
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	HP
No Offering	
No Offering	

Microsoft	No Offering
No Offering	

Features	Base Specifications	Product Details	Product Details	Product Details	Product Details
Weight (lbs. including battery)	5.5	2.65	4.35		
Display Size	14 inch FHD Wide Screen	14 Inch FHD Wide Screen	14 Inch FHD WVA Widescreen		
Processor	Intel Core i5 1145G7 2.60GHz, 8M, 4 Core, 8 Thread	Intel Core i5 1245U 1.60GHz, 12M, 10 Core, 12 Thread	Intel Core i7 1185G7 3.0GHz, 12M, 4 Core, 8 Thread		
BIOS Configuration	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive		
Operating System	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit		
RAM	16GB DDR4 non-ECC	16GB DDR3 non-ECC	16GB DDR4 non-ECC		
Hard Disk	256GB PCIe non-OPAL	256GB PCIe non-OPAL	256GB PCIe non-OPAL		
Removable Storage					
Video Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics		
Web Camera	Front IR	Front IR	Front IR		
Sound	High Definition Audio	High Definition Audio	High Definition Audio		
Network Interface					
Broadband Interface					
Wireless Interface	802.11 AX	Intel 802.11 AX	Intel 802.11 AX		
Bluetooth Interface	5	5.2	5		
Biometrics	Yes		Yes		
Security	Intel vPro	Intel vPro	Intel vPro		
EnergyStar Level	7	8	7		
ePEAT Level	Bronze	Silver	Silver		
Main Warranty	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)		
Battery Warranty	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement		
Mouse (Touchpad / Touchstick)		Touchpad	Touchpad		
Keyboard Type (Phys./Virt./# keys)		86 Keys	82 Keys		
RAM Maximum		48GB non-ECC	64GB non-ECC		
Media Card Slots			SD Card Reader		
USB Ports - Rear (2.0 / 3.0 / C)		3.2 (2) / C (2)	3.0 (3) / C (2)		
Maximum Supported Video Resolution		3840 x 2640	1920 x 1080		
Serial Port (9pin, 16550)			1		
VGA Out					
HDMI Out		1	1		
DisplayPort Out					
Headphone/Speaker Line Out		1	1		
Accelerometer		Yes			
GPS position		via WWAN			
e-Compass		Yes			
Gyro		Yes			
Battery Type (Cell)		4 Cell	3 Cell		
Expected Battery life (Hours)		8	6		
Recharge Time (Hours)		1.25	1.25		
AC Adapter (Watts)		65	90		
Cable Lock Slot		Yes	Yes		
Acoustics (max. dB)		20	26.2		
Dimensions (inches W x D x H)		12.38 x 8.75 x 0.61	13.38 x 8.66 x 1.32		

UPGRADE OPTIONS (to be ordered at initial purchase)

Display	FHD/Outdoor/Backlit/Security	FHD 300Nits Touchscreen	FHD WVA Touchscreen Outdoor		
Display	FHD/Outdoor/Backlit/Security	FHD 500Nits Touchscreen w/ePrivacy	Backlit Keyboard		
Display	FHD/Outdoor/Backlit/Security	WQUXGA 500Nits Touchscreen			
RAM	32GB non-ECC	32GB non-ECC	32GB non-ECC		
RAM	64GB non-ECC		64GB non-ECC		
Solid State Drive	512GB PCIe non-OPAL	512GB PCIe non-OPAL	512GB PCIe non-OPAL		
Solid State Drive	1TB PCIe non-OPAL	1TB PCIe non-OPAL	1TB PCIe non-OPAL		
Solid State Drive	2TB PCIe non-OPAL	2TB PCIe non-OPAL	2TB PCIe non-OPAL		
Video Graphics	AMD / nVidia w/2GB				
Video Graphics	AMD / nVidia w/4GB				
Video Graphics	AMD / nVidia w/6GB				
Video Graphics	AMD / nVidia w/8GB				
Battery (Replacement)	Battery Replacement	86Whr Battery			
Battery (Replacement)	Battery Replacement				
Broadband (Built-in)	Gobi w/A-GPS	Gobi Fibocom L860 R+ LTE eSim			
Broadband (Built-in)	AT&T w/A-GPS		AT&T w/A-GPS		
Broadband (Built-in)	Verizon w/A-GPS		Verizon w/A-GPS		
Modem (Built-in)	56K v.92				
Security	3 Yr. Absolute Resilience	3 Yr. Absolute Resilience	3 Yr. Absolute Resilience		
Security	4 Yr. Absolute Resilience	4 Yr. Absolute Resilience	4 Yr. Absolute Resilience		
Security	5 Yr. Absolute Resilience	5 Yr. Absolute Resilience	5 Yr. Absolute Resilience		

ACCESSORY OPTIONS (ordered at initial purchase or at a later time)

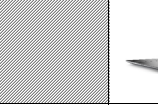
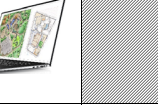
Port Replicator	Port Replicator	USB-C Docking Station	Rugged Display Port Desk Dock		
Port Replicator	Port Replicator	USB-C Mini Dock			
Port Replicator	Port Replicator	Thunderbolt Docking Station			
Display Adapter	USB to VGA	USB-C to VGA	USB-C to VGA		
Display Adapter	USB to DisplayPort	USB-C to DisplayPort	USB-C to DisplayPort		
Display Adapter	USB to HDMI	USB-C to HDMI	USB-C to HDMI		
Display Adapter	miniDisplayPort to VGA				
Display Adapter	miniDisplayPort to DisplayPort		MiniDisplayPort to DisplayPort		
Display Adapter	miniDisplayPort to HDMI				
Display Adapter	DisplayPort to VGA		DisplayPort to VGA		
Display Adapter	DisplayPort to HDMI				
Display Adapter	HDMI to VGA		HDMI to VGA		
Display Adapter	Wireless				
Stand	Laptop/Monitor	Adjustable Notebook Stand			
Stand	Laptop/Monitor	2-in-1 Laptop Stand			
Stand	Laptop/Monitor				
Keyboard/Pen/Dock	External	Pen Pro			
Keyboard/Pen/Dock	External	External USB Keyboard			
Keyboard/Pen/Dock	External	External USB Mouse			
Keyboard/Pen/Dock	External	External USB-C Mouse			
Removable Storage	USB 8x DVD+/-RW	USB 8x DVD+/-RW	USB 8x DVD+/-RW		
Battery (Additional)	Battery Additional	Go USB-C Laptop Power Bank	3 Cell 51 wHr		
Battery (Additional)	Battery Additional		3 Cell 53.5 wHr		
Network Adapter	USB to Ethernet 10/100/1000	USB-C to Ethernet	USB 3.0 to Ethernet		
Power (Additional)	AC Adapter	USB-C Portable AC Adapter 45W	Slim Power Adapter - 65W Type-C		
Power (Additional)	Auto/Air Adapter	USB-C DC Travel Adapter 65W	AC/DC Auto-Air Adapter 90W		
Lock Kit	Lock Kit	NanoSaver Cable Lock	Lock Kit		
Case	Nylon/Neoprene	ThinkPad Basic Top load	Rugged Escape Backpack 15		
Case	Leather	Professional 15.6 Top load Case			
Case	Ruggedized				
Case	Deluxe w/Wheels				

CONFIGURATION 16 15" WORKSTATION LAPTOP COMPARISON					
		Lenovo ThinkPad P1 Gen 5	Dell No Offering	HP No Offering	Microsoft No Offering
		\$2,585.99	No Offering	No Offering	No Offering
Features	Base Specifications	Product Details	Product Details	Product Details	Product Details
Weight (. lbs. including battery)	6	3.99			
Display Size	15 inch FHD Wide Screen	16 Inch FHD Wide Screen			
Processor	Intel Core i9 12900H 2.50GHz, 24M, 14 Core, 20 Thread	Intel Core i9 12900H 2.50GHz, 24M, 14 Core, 20 Thread			
BIOS Configuration	Boot to Hard Drive	Boot to Hard Drive			
Operating System	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit			
RAM	16GB ECC	16GB ECC			
Hard Disk	1TB PCIe non-OPAL	1TB PCIe non-OPAL			
Removable Storage					
Video Graphics	AMD / nVidia w/4GB	nVidia Quadro T1200 w/4GB			
Web Camera	Front IR	Front IR			
Sound	High Definition Audio	High Definition Audio			
Network Interface					
Broadband Interface					
Wireless Interface	802.11 AX	Intel 802.11 AX			
Bluetooth Interface	5	5.2			
Biometrics	Yes	Yes			
Security	Intel vPro	Intel vPro			
EnergyStar Level	7	8			
ePEAT Level	Bronze	Silver			
Main Warranty	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)			
Battery Warranty	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement			
Mouse (Touchpad / Touchstick)		Touchpad			
Keyboard Type (Phys./Virt./# keys)		101 Keys			
RAM Maximum		64GB ECC			
Media Card Slots		MicroSD			
USB Ports - Rear (2.0 / 3.0 / C)		3.2 (2) / C (2)			
Maximum Supported Video Resolution		3840 x 2640			
Serial Port (9pin, 16550)					
VGA Out					
HDMI Out		1			
DisplayPort Out					
Headphone/Speaker Line Out		1			
Accelerometer		Yes			
GPS position		via WWAN			
e-Compass		Yes			
Gyro		Yes			
Battery Type (Cell)		4 Cell			
Expected Battery life (Hours)		8			
Recharge Time (Hours)		1.25			
AC Adapter (Watts)		170			
Cable Lock Slot		Yes			
Acoustics (max. dB)		20			
Dimensions (inches W x D x H)		14.15 x 9.99 x 0.70			
UPGRADE OPTIONS (to be ordered at initial purchase)					
Display	FHD/Outdoor/Backlit/Security	WQXGA QHD+			
Display	FHD/Outdoor/Backlit/Security	WQUXGA UHD+			
Display	FHD/Outdoor/Backlit/Security	WAUXGA UHD+ Touchscreen			
RAM	32GB ECC	32GB ECC			
RAM	64GB ECC	64GB ECC			
RAM	128GB ECC				
Solid State Drive	2TB PCIe non-OPAL	2TB PCIe non-OPAL			
2nd Solid State Drive	2TB PCIe non-OPAL				
Video Graphics	AMD / nVidia w/6GB	nVidia Quadro RTX A2000 w/8GB			
Video Graphics	AMD / nVidia w/8GB	nVidia Quadro RTX 3080 Ti w/16GB			
Battery (Replacement)	Battery Replacement				
Battery (Replacement)	Battery Replacement				
Broadband (Built-in)	Gobi w/A-GPS	Gobi Fibocom L860 R+ LTE eSim			
Broadband (Built-in)	AT&T w/A-GPS				
Broadband (Built-in)	Verizon w/A-GPS				
Modem (Built-in)	56K v.92				
Security	3 Yr. Absolute Resilience	3 Yr. Absolute Resilience			
Security	4 Yr. Absolute Resilience	4 Yr. Absolute Resilience			
Security	5 Yr. Absolute Resilience	5 Yr. Absolute Resilience			
ACCESSORY OPTIONS (ordered at initial purchase or at a later time)					
Port Replicator	Port Replicator	Thunderbolt Workstation Docking			
Port Replicator	Port Replicator				
Port Replicator	Port Replicator				
Display Adapter	USB to VGA	USB-C to VGA			
Display Adapter	USB to DisplayPort	USB-C to DisplayPort			
Display Adapter	USB to HDMI	USB-C to HDMI			
Display Adapter	miniDisplayPort to VGA				
Display Adapter	miniDisplayPort to DisplayPort				
Display Adapter	miniDisplayPort to HDMI				
Display Adapter	DisplayPort to VGA				
Display Adapter	DisplayPort to HDMI				
Display Adapter	HDMI to VGA				
Display Adapter	Wireless				
Stand	Laptop/Monitor	Adjustable Notebook Stand			
Stand	Laptop/Monitor	2-in-1 Laptop Stand			
Stand	Laptop/Monitor				
Keyboard/Pen/Dock	External	Pen Pro			
Keyboard/Pen/Dock	External	External USB Keyboard			
Keyboard/Pen/Dock	External	External USB Mouse			
Keyboard/Pen/Dock	External	External USB-C Mouse			
Removable Storage	USB 8x DVD+/-RW	USB 8x DVD+/-RW			
Battery (Additional)	Battery Additional	Go USB-C Laptop Power Bank			
Battery (Additional)	Battery Additional				
Network Adapter	USB to Ethernet 10/100/1000	USB-C to Ethernet			
Power (Additional)	AC Adapter	Mobile Workstation AC Adapter 230W			
Power (Additional)	Auto/Air Adapter				
Lock Kit	Lock Kit	Nano Cable Lock			
Case	Nylon/Neoprene	ThinkPad Professional Top load Case			
Case	Leather	ThinkPad Professional Backpack			
Case	Ruggedized				
Case	Deluxe w/Wheels				

CONFIGURATION 17 17" PERFORMANCE LAPTOP COMPARISON					
		Lenovo ThinkPad P16 Gen 1 \$2,401.99	Dell Precision 5770 \$2,403.00	HP No Offering No Offering	Microsoft No Offering No Offering
		Product Details	Product Details	Product Details	Product Details
Features	Base Specifications	Product Details	Product Details	Product Details	Product Details
Weight (lbs. including battery)	7.5	6.5	6.65		
Display Size	17 Inch FHD Wide Screen	16 Inch FHD Wide Screen	17.3 Inch FHD Wide Screen		
Processor	Intel Core i7 12800H 2.40GHz, 24M, 14 Core, 20 Thread	Intel Core i7 12800H 2.40GHz, 24M, 14 Core, 20 Thread	Intel Core i7 12800H 2.40GHz, 24M, 14 Core, 20 Thread		
BIOS Configuration	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive		
Operating System	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit		
RAM	16GB DDR3 non-ECC	16GB DDR3 non-ECC	16GB DDR4 non-ECC		
Hard Disk	512GB PCIe non-OPAL	512GB PCIe non-OPAL	512GB PCIe non-OPAL		
Removable Storage					
Video Graphics	AMD / nVidia w/4GB	nVidia Quadro T1200 w/4GB	nVidia RTX A2000 w/8GB		
Web Camera	Front IR	Front IR	Front IR		
Sound	High Definition Audio	High Definition Audio	High Definition Audio		
Network Interface					
Broadband Interface					
Wireless Interface	802.11 AX	Intel 802.11 AX	Intel 802.11 AX		
Bluetooth Interface	5	5.2	5		
Biometrics	Yes	Yes	Yes		
Security	Intel vPro	Intel vPro	Intel vPro		
EnergyStar Level	7	8	7		
ePEAT Level	Bronze	Silver	Gold		
Main Warranty	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)		
Battery Warranty	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement		
Mouse (Touchpad / Touchstick)		Touchpad	Touchpad		
Keyboard Type (Phys./Virt./# keys)		101 Keys	100 Keys		
RAM Maximum		128GB non-ECC	128GB non-ECC		
Media Card Slots		MicroSD	SD Card Reader		
USB Ports - Rear (2.0 / 3.0 / C)		3.2 (2) / C (2)	3.2 (3) / C (2)		
Maximum Supported Video Resolution		3840 x 2640	3840 x 2160		
Serial Port (9pin, 16550)					
VGA Out					
HDMI Out		1	1		
DisplayPort Out			1		
Headphone/Speaker Line Out		1	1		
Accelerometer		Yes			
GPS position		via WWAN			
e-Compass		Yes			
Gyro		Yes			
Battery Type (Cell)		4 Cell	6 Cell		
Expected Battery life (Hours)		8	10		
Recharge Time (Hours)		1.25	.2		
AC Adapter (Watts)		170	240		
Cable Lock Slot		Yes	Yes		
Acoustics (max. dB)		20	26.4		
Dimensions (inches W x D x H)		14.25 x 10.06 x 0.82	15.75 x 10.38 x 1.13		
UPGRADE OPTIONS (to be added at initial purchase)					
Display	FHD/Outdoor/Backlit/Security	WQXGA QHD+			
Display	FHD/Outdoor/Backlit/Security	WQXGA UHD+			
Display	FHD/Outdoor/Backlit/Security	WAXUGA UHD+ Touchscreen			
RAM	32GB non-ECC	32GB non-ECC	32GB non-ECC		
RAM	64GB non-ECC	64GB non-ECC	64GB non-ECC		
Solid State Drive	1TB PCIe non-OPAL	1TB PCIe non-OPAL	1TB PCIe non-OPAL		
Solid State Drive	2TB PCIe non-OPAL	2TB PCIe non-OPAL	2TB PCIe non-OPAL		
Video Graphics	AMD / nVidia w/6GB	nVidia Quadro RTX A2000 w/8GB			
Video Graphics	AMD / nVidia w/8GB	nVidia Quadro RTX 3080 Ti w/16GB			
Battery (Replacement)	Battery Replacement				
Battery (Replacement)	Battery Replacement				
Broadband (Built-in)	Gobi w/A-GPS	Gobi Fibocom L860 R+ LTE eSim			
Broadband (Built-in)	AT&T w/A-GPS				
Broadband (Built-in)	Verizon w/A-GPS				
Modem (Built-in)	56K v.92				
Security	3 Yr. Absolute Resilience	3 Yr. Absolute Resilience	3 Yr. Absolute Resilience		
Security	4 Yr. Absolute Resilience	4 Yr. Absolute Resilience	4 Yr. Absolute Resilience		
Security	5 Yr. Absolute Resilience	5 Yr. Absolute Resilience	5 Yr. Absolute Resilience		
ACCESSORY OPTIONS (to be added at initial purchase)					
Port Replicator	Port Replicator	Thunderbolt Workstation Docking	Docking Station - WD19TBS		
Port Replicator	Port Replicator		Docking Station - WD19DCS		
Port Replicator	Port Replicator				
Display Adapter	USB to VGA	USB-C to VGA	USB-C to VGA		
Display Adapter	USB to DisplayPort	USB-C to DisplayPort	USB-C to DisplayPort		
Display Adapter	USB to HDMI	USB-C to HDMI	USB-C to HDMI		
Display Adapter	miniDisplayPort to VGA				
Display Adapter	miniDisplayPort to DisplayPort		MiniDisplayPort to DisplayPort		
Display Adapter	miniDisplayPort to HDMI				
Display Adapter	DisplayPort to VGA		DisplayPort to VGA		
Display Adapter	DisplayPort to HDMI				
Display Adapter	HDMI to VGA		HDMI to VGA		
Display Adapter	Wireless				
Stand	Laptop/Monitor	Adjustable Notebook Stand			
Stand	Laptop/Monitor	2-in-1 Laptop Stand			
Stand	Laptop/Monitor				
Keyboard/Pen/Dock	External	Pen Pro	Pro Wireless Keyboard & Mouse		
Keyboard/Pen/Dock	External	External USB Keyboard	Premier Wireless Keyboard & Mouse		
Keyboard/Pen/Dock	External	External USB Mouse			
Keyboard/Pen/Dock	External	External USB-C Mouse			
Removable Storage	USB 8x DVD+/-RW	USB 8x DVD+/-RW	USB 8x DVD+/-RW		
Battery (Additional)	Battery Additional	Go USB-C Laptop Power Bank	3 Cell 56Whr		
Battery (Additional)	Battery Additional		6 Cell 97Whr		
Network Adapter	USB to Ethernet 10/100/1000	USB-C to Ethernet	USB 3.0 to Ethernet		
Power (Additional)	AC Adapter	Mobile Workstation AC Adapter 230W	Slim Power Adapter - 130W Type-C		
Power (Additional)	Auto/Air Adapter				
Lock Kit	Lock Kit	Nano Cable Lock	Lock Kit		
Case	Nylon/Neoprene	ThinkPad Professional Top load Case	Pro Backpack 17		
Case	Leather	ThinkPad Professional Backpack			
Case	Ruggedized				
Case	Deluxe w/Wheels				

CONFIGURATION 18 17" WORKSTATION LAPTOP COMPARISON					
		Dell No Offering No Offering	HP No Offering No Offering	Lenovo No Offering No Offering	Microsoft No Offering No Offering
		Product Details	Product Details	Product Details	Product Details
Features	Base Specifications				
Weight (. lbs. including battery)	7.5				
Display Size	17 inch FHD Wide Screen				
Processor	Intel Core i9 12900H 2.50GHz, 24M, 14 Core, 20 Thread				
BIOS Configuration	Boot to Hard Drive				
Operating System	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit				
RAM	16GB ECC				
Hard Disk	1TB PCIe non-OPAL				
Removable Storage					
Video Graphics	AMD / nVidia w/4GB				
Web Camera	Front IR				
Sound	High Definition Audio				
Network Interface					
Broadband Interface					
Wireless Interface	802.11 AX				
Bluetooth Interface	5				
Biometrics	Yes				
Security	Intel vPro				
EnergyStar Level	7				
ePEAT Level	Bronze				
Main Warranty	4 Year NBD Onsite (Accidental Damage, Keep Your HD)				
Battery Warranty	3 Year, 1 Time Replacement				
Mouse (Touchpad / Touchstick)					
Keyboard Type (Phys./Virt./# keys)					
RAM Maximum					
Media Card Slots					
USB Ports - Rear (2.0 / 3.0 / C)					
Maximum Supported Video Resolution					
Serial Port (9pin, 16550)					
VGA Out					
HDMI Out					
DisplayPort Out					
Headphone/Speaker Line Out					
Accelerometer					
GPS position					
e-Compass					
Gyro					
Battery Type (Cell)					
Expected Battery life (Hours)					
Recharge Time (Hours)					
AC Adapter (Watts)					
Cable Lock Slot					
Acoustics (max. dB)					
Dimensions (inches W x D x H)					
UPGRADE OPTIONS (to be ordered at initial purchase)					
Display	FHD/Outdoor/Backlit/Security				
Display	FHD/Outdoor/Backlit/Security				
Display	FHD/Outdoor/Backlit/Security				
RAM	32GB ECC				
RAM	64GB ECC				
RAM	128GB ECC				
Solid State Drive	2TB PCIe non-OPAL				
2nd Solid State Drive	2TB PCIe non-OPAL				
Video Graphics	AMD / nVidia w/6GB				
Video Graphics	AMD / nVidia w/8GB				
Battery (Replacement)	Battery Replacement				
Battery (Replacement)	Battery Replacement				
Broadband (Built-in)	Gobi w/A-GPS				
Broadband (Built-in)	AT&T w/A-GPS				
Broadband (Built-in)	Verizon w/A-GPS				
Modem (Built-in)	56K v.92				
Security	3 Yr. Absolute Resilience				
Security	4 Yr. Absolute Resilience				
Security	5 Yr. Absolute Resilience				
ACCESSORY OPTIONS (ordered at initial purchase or at a later time)					
Port Replicator	Port Replicator				
Port Replicator	Port Replicator				
Port Replicator	Port Replicator				
Display Adapter	USB to VGA				
Display Adapter	USB to DisplayPort				
Display Adapter	USB to HDMI				
Display Adapter	miniDisplayPort to VGA				
Display Adapter	miniDisplayPort to DisplayPort				
Display Adapter	miniDisplayPort to HDMI				
Display Adapter	DisplayPort to VGA				
Display Adapter	DisplayPort to HDMI				
Display Adapter	HDMI to VGA				
Display Adapter	Wireless				
Stand	Laptop/Monitor				
Stand	Laptop/Monitor				
Stand	Laptop/Monitor				
Keyboard/Pen/Dock	External				
Keyboard/Pen/Dock	External				
Keyboard/Pen/Dock	External				
Keyboard/Pen/Dock	External				
Removable Storage	USB 8x DVD+-RW				
Battery (Additional)	Battery Additional				
Battery (Additional)	Battery Additional				
Network Adapter	USB to Ethernet 10/100/1000				
Power (Additional)	AC Adapter				
Power (Additional)	Auto/Air Adapter				
Lock Kit	Lock Kit				
Case	Nylon/Neoprene				
Case	Leather				
Case	Ruggedized				
Case	Deluxe w/Wheels				

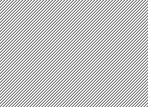
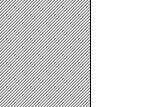
DELL LAPTOPS

Sterling Computers MA-IS-2240252	CONFIGURATION 1	CONFIGURATION 2	CONFIGURATION 3	CONFIGURATION 4	CONFIGURATION 5	CONFIGURATION 6	CONFIGURATION 7	CONFIGURATION 8	CONFIGURATION 9	CONFIGURATION 10	CONFIGURATION 11	CONFIGURATION 12	CONFIGURATION 13	CONFIGURATION 14	CONFIGURATION 15	CONFIGURATION 16	CONFIGURATION 17	CONFIGURATION 18
	10" TABLET	10" SEMI-RUGGED TABLET	12" CHROMEBOOK	12" CONVERTIBLE BUSINESS LAPTOP	12" CONVERTIBLE PERFORMANCE LAPTOP	12" 2-IN-1 BUSINESS TABLET	12" 2-IN-1 PERFORMANCE TABLET	14" CHROMEBOOK	14" BUSINESS LAPTOP	14" PERFORMANCE LAPTOP	14" 2-IN-1 BUSINESS TABLET	14" 2-IN-1 PERFORMANCE TABLET	14" SEMI-RUGGED LAPTOP	15" BUSINESS LAPTOP	15" PERFORMANCE LAPTOP	15" WORKSTATION LAPTOP	17" PERFORMANCE LAPTOP	17" WORKSTATION LAPTOP
																		
Model	Latitude 7320	Latitude 7220 Rugged Extreme	Latitude 5400 Chrome	Latitude 5330 2-in-1	Latitude 5330 2-in-1	Latitude 7330 2-in-1	Latitude 7330 2-in-1	Latitude 5400 Chrome	Latitude 5430	Latitude 5430	Latitude 7430 2-in-1	Latitude 7430 2-in-1	Latitude 5430 Rugged	Latitude 5530	Latitude 5530	No Offering	Precision 5770	No Offering
Cost	\$1,580.48	\$1,901.14	\$958.04	\$1,460.66	\$1,666.68	\$1,633.82	\$1,839.84	\$1,145.37	\$1,481.45	\$1,693.34	\$1,672.29	\$1,866.75	\$2,107.82	\$1,491.71	\$1,656.28	No Offering	\$2,403.00	No Offering
Features	Weight (lbs. including battery) Display Size Processor BIOS Configuration Operating System RAM Hard Disk Removable Storage Video Graphics Web Camera Sound Network Interface Broadband Interface Wireless Interface Bluetooth Interface Biometrics Security EnergyStar Level ePEAT Level Main Warranty Battery Warranty Keyboard Type (Phys./Virtual Keys) RAM Maximum Media Card Slots USB Ports - Rear (2.0/3.0/USB) Maximum Supported Video Resolution Serial Port (9pin, 16550) VGA Out HDMI DisplayPort Out Headphone/Speaker Line Out Accelerometer GPS position e-Compass Gyro Battery Type (Cell) Expected Battery life (Hours) Recharge Time (Hours) AC Adapter (Watts) Cable Lock Slot Acoustics (max. dB) Dimensions (inches W x D x H)	1.7 13 Inch FHD Touchscreen Intel Core i5 1140G7 1.80GHz, 8M, 4 Core, 8 Thread Boot to Hard Drive Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit 16GB DDR4 non-ECC 256GB PCIe non-OPAL Intel Iris Graphics Front IR High Definition Audio Intel 802 11 AX 5.2 Yes Intel vPro Gold 4 Year NBD Onsite (Accidental Damage, Keep Your HD) 3 Year, 1 Time Replacement Touchscreen 82 Virtual 16GB non-ECC C (2) 1802 x 1280 1920 x 1280 Serial Port (9pin, 16550) 1 1 1 Yes via WWAN Card Yes 2 Cell 10.5 1.25 65 Yes 19.3 11.35 x 8.1 x 0.33	3 11.6 Inch FHD Touchscreen Intel Core i5 8265U 1.90GHz, 8M, 4 Core, 8 Thread Boot to Hard Drive Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit 16GB DDR4 non-ECC 256GB PCIe non-OPAL Intel HD Graphics 620 Front IR High Definition Audio Intel 802 11 AX 5.2 Yes Intel vPro Silver 4 Year NBD Onsite (Accidental Damage, Keep Your HD) 3 Year, 1 Time Replacement Touchscreen 82 Virtual 16GB non-ECC MicroSD 3.1 (1) / C (1) 1802 x 1280 1920 x 1080 Serial Port (9pin, 16550) 1 1 1 Yes via WWAN Card Yes 2 Cell 10.5 1.25 65 Yes 19.3 12.29 x 7.99 x 0.96	3 11.6 Inch FHD Touchscreen Chrome 4GB DDR4 non-ECC 64GB eMMC non-OPAL Intel HD Graphics 620 Front IR High Definition Audio Intel 802 11 AC 5 Yes Intel vPro Gold 4 Year NBD Onsite (Accidental Damage, Keep Your HD) 3 Year, 1 Time Replacement Touchscreen 82 Virtual 32GB non-ECC SD Card Reader 3.1 (1) / C (1) 1920 x 1080 Serial Port (9pin, 16550) 1 1 1 Yes via WWAN Card Yes 3 Cell 12 1.5 65 Yes 20.3 12.1 x 8.5 x 0.77	2.9 13.3 Inch FHD Touchscreen Intel Core i5 1245U 1.80GHz, 12M, 10 Core, 12 Thread Boot to Hard Drive Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit 16GB DDR4 non-ECC 512GB PCIe non-OPAL Intel Iris Xe Graphics Front IR High Definition Audio Intel 802 11 AX 5 Yes Intel vPro Gold 4 Year NBD Onsite (Accidental Damage, Keep Your HD) 3 Year, 1 Time Replacement Touchscreen 79 Keys 32GB non-ECC UltraSD 3.2 (2) / C (2) 1920 x 1080 Serial Port (9pin, 16550) 1 1 1 Yes via WWAN Card Yes 3 Cell 12 1.25 65 Yes 20.2 12.04 x 8.17 x 0.67	3.06 13.3 Inch FHD Touchscreen Intel Core i5 1245U 1.80GHz, 12M, 10 Core, 12 Thread Boot to Hard Drive Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit 16GB DDR4 non-ECC 256GB PCIe non-OPAL Intel Iris Xe Graphics Front IR High Definition Audio Intel 802 11 AX 5 Yes Intel vPro Gold 4 Year NBD Onsite (Accidental Damage, Keep Your HD) 3 Year, 1 Time Replacement Touchscreen 79 Keys 32GB non-ECC UltraSD 3.2 (2) / C (2) 1920 x 1080 Serial Port (9pin, 16550) 1 1 1 Yes via WWAN Card Yes 3 Cell 12 1.25 65 Yes 22.6 12.07 x 8.17 x 0.67	3.06 13.3 Inch FHD Touchscreen Intel Core i7 1265U 1.80GHz, 12M, 10 Core, 12 Thread Boot to Hard Drive Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit 16GB DDR4 non-ECC 512GB PCIe non-OPAL Intel Iris Xe Graphics Front IR High Definition Audio Intel 802 11 AX 5 Yes Intel vPro Gold 4 Year NBD Onsite (Accidental Damage, Keep Your HD) 3 Year, 1 Time Replacement Touchscreen 79 Keys 32GB non-ECC UltraSD 3.2 (2) / C (2) 1920 x 1080 Serial Port (9pin, 16550) 1 1 1 Yes via WWAN Card Yes 3 Cell 12 1.25 65 Yes 22.6 12.07 x 8.17 x 0.67	3.24 14 Inch FHD Wide Screen Intel Core i7 1265U 1.90GHz, 8M, 4 Core, 8 Thread Boot to Hard Drive Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit 16GB DDR4 non-ECC 256GB PCIe non-OPAL Intel Iris Xe Graphics Front IR High Definition Audio Intel 802 11 AX 5 Yes Intel vPro Gold 4 Year NBD Onsite (Accidental Damage, Keep Your HD) 3 Year, 1 Time Replacement Touchscreen 79 Keys 32GB non-ECC UltraSD 3.2 (2) / C (2) 1920 x 1080 Serial Port (9pin, 16550) 1 1 1 Yes via WWAN Card Yes 3 Cell 12 1.5 65 Yes 21.3 12.7 x 8.5 x 0.77	3.03 14 Inch FHD Wide Screen Intel Core i5 1245U 1.80GHz, 12M, 10 Core, 12 Thread Boot to Hard Drive Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit 16GB DDR4 non-ECC 512GB PCIe non-OPAL Intel Iris Xe Graphics Front IR High Definition Audio Intel 802 11 AX 5 Yes Intel vPro Gold 4 Year NBD Onsite (Accidental Damage, Keep Your HD) 3 Year, 1 Time Replacement Touchscreen 79 Keys 32GB non-ECC UltraSD 3.2 (2) / C (2) 1920 x 1080 Serial Port (9pin, 16550) 1 1 1 Yes via WWAN Card Yes 3 Cell 12 1.5 65 Yes 22.1 12.65 x 8.35 x 0.76	3.03 14 Inch FHD Wide Screen Intel Core i5 1245U 1.80GHz, 12M, 10 Core, 12 Thread Boot to Hard Drive Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit 16GB DDR4 non-ECC 512GB PCIe non-OPAL Intel Iris Xe Graphics Front IR High Definition Audio Intel 802 11 AX 5 Yes Intel vPro Gold 4 Year NBD Onsite (Accidental Damage, Keep Your HD) 3 Year, 1 Time Replacement Touchscreen 79 Keys 32GB non-ECC UltraSD 3.2 (2) / C (2) 1920 x 1080 Serial Port (9pin, 16550) 1 1 1 Yes via WWAN Card Yes 3 Cell 12 1.5 65 Yes 22.1 12.65 x 8.35 x 0.76	3 14 Inch FHD Touchscreen Intel Core i5 1245U 1.80GHz, 12M, 10 Core, 12 Thread Boot to Hard Drive Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit 16GB DDR4 non-ECC 256GB PCIe non-OPAL Intel Iris Xe Graphics Front IR High Definition Audio Intel 802 11 AX 5 Yes Intel vPro Gold 4 Year NBD Onsite (Accidental Damage, Keep Your HD) 3 Year, 1 Time Replacement Touchscreen 79 Keys 32GB non-ECC UltraSD 3.2 (2) / C (2) 1920 x 1080 Serial Port (9pin, 16550) 1 1 1 Yes via WWAN Card Yes 3 Cell 12 1.5 65 Yes 19.7 12.65 x 8.22 x 0.68	4.35 14.5 Inch FHD WVA Widescreen Intel Core i5 1245U 3.0GHz, 12M, 4 Core, 8 Thread Boot to Hard Drive Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit 16GB DDR4 non-ECC 256GB PCIe non-OPAL Intel Iris Xe Graphics Front IR High Definition Audio Intel 802 11 AX 5 Yes Intel vPro Silver 4 Year NBD Onsite (Accidental Damage, Keep Your HD) 3 Year, 1 Time Replacement Touchscreen 100 Keys 64GB non-ECC SD Card Reader 3.2 (2) / C (2) 3820 x 2160 1 1 1 Yes via WWAN Card Yes 3 Cell 9.25 1.25 65 Yes 22.1 13.38 x 8.66 x 1.32	3.5 15.6 Inch FHD Wide Screen Intel Core i7 11850G 1.70GHz, 12M, 4 Core, 8 Thread Boot to Hard Drive Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit 16GB DDR4 non-ECC 256GB PCIe non-OPAL Intel Iris Xe Graphics Front IR High Definition Audio Intel 802 11 AX 5 Yes Intel vPro Gold 4 Year NBD Onsite (Accidental Damage, Keep Your HD) 3 Year, 1 Time Replacement Touchscreen 100 Keys 64GB non-ECC UltraSD 3.2 (2) / C (2) 3820 x 2160 1 1 1 Yes via WWAN Card Yes 3 Cell 9.25 1.5 65 Yes 22.1 12.65 x 8.35 x 0.76	3.5 15.6 Inch FHD Wide Screen Intel Core i7 1280P 1.80GHz, 12M, 14 Core, 20 Thread Boot to Hard Drive Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit 16GB DDR4 non-ECC 512GB PCIe non-OPAL nVidia RTX A2000 w/8GB Front IR High Definition Audio Intel 802 11 AX 5 Yes Intel vPro Gold 4 Year NBD Onsite (Accidental Damage, Keep Your HD) 3 Year, 1 Time Replacement Touchscreen 100 Keys 128GB non-ECC SD Card Reader 3.2 (3) / C (2) 3820 x 2160 1 1 1 Yes via WWAN Card Yes 6 Cell 10 2 240 Yes 26.4 15.75 x 10.38 x 1.13				
UPGRADE OPTIONS (to be ordered at initial purchase)																		
Display - FHD/Outdoor/Backlit/Security			FHD Touchscreen Backlit Keyboard		Backlight Keyboard		Backlight Keyboard		Backlight Keyboard		FHD Touchscreen Backlit Keyboard		FHD Touchscreen Backlit Keyboard		FHD WVA Touchscreen Outdoor Backlit Keyboard		FHD Touchscreen UHD non-Touch Widescreen Backlit Keyboard	
Display - FHD/Outdoor/Backlit/Security																		
Op. System - Chrome Ent. Mgmt. - 1Yr Lic.			Chrome Ent. Mgmt. - 1Yr Lic.								Chrome Ent. Mgmt. 1Yr. Lic.							
RAM - 8GB non-ECC																		
RAM - 16GB non-ECC																		
RAM - 32GB non-ECC																		
RAM - 64GB non-ECC																		
RAM - 32GB ECC																		
RAM - 64GB ECC																		
RAM - 128GB ECC																		
Solid State Drive - 84GB eMMC non-OPAL																		
Solid State Drive - 64GB PCIe non-OPAL																		
Solid State Drive - 128GB PCIe non-OPAL																		
Solid State Drive - 256GB PCIe non-OPAL																		
Solid State Drive - 512GB PCIe non-OPAL																		
Solid State Drive - 1TB PCIe non-OPAL																		
Solid State Drive - 2TB PCIe non-OPAL																		
2nd Solid State Drive - 2TB PCIe non-OPAL																		
Video Graphics - AMD / nVidia w/2GB																		
Video Graphics - AMD / nVidia w/4GB																		
Video Graphics - AMD / nVidia w/8GB																		
Battery (Replacement) - Battery Replacement																		
Battery (Replacement) - Battery Replacement																		
Broadband (Built-in) - Gobi w/iA-GPS			Gobi w/iA-GPS		Gobi w/iA-GPS		Gobi w/iA-GPS		Gobi w/iA-GPS		Gobi w/iA-GPS		Gobi w/iA-GPS		Gobi w/iA-GPS		Gobi w/iA-GPS	
Broadband (Built-in) - AT&T w/iA-GPS			AT&T w/iA-GPS		AT&T w/iA-GPS		AT&T w/iA-GPS		AT&T w/iA-GPS		AT&T w/iA-GPS		AT&T w/iA-GPS		AT&T w/iA-GPS		AT&T w/iA-GPS	
Broadband (Built-in) - Verizon w/iA-GPS			Verizon w/iA-GPS		Verizon w/iA-GPS		Verizon w/iA-GPS		Verizon w/iA-GPS		Verizon w/iA-GPS		Verizon w/iA-GPS		Verizon w/iA-GPS		Verizon w/iA-GPS	
Modem (Built-in) - 5Gk v52																		
Security - 3 Yr. Absolute Resilience			3 Yr. Absolute Resilience		3 Yr. Absolute Resilience		3 Yr. Absolute Resilience		3 Yr. Absolute Resilience		3 Yr. Absolute Resilience		3 Yr. Absolute Resilience		3 Yr. Absolute Resilience		3 Yr. Absolute Resilience	
Security - 4 Yr. Absolute Resilience			4 Yr. Absolute Resilience		4 Yr. Absolute Resilience		4 Yr. Absolute Resilience		4 Yr. Absolute Resilience		4 Yr. Absolute Resilience		4 Yr. Absolute Resilience		4 Yr. Absolute Resilience		4 Yr. Absolute Resilience	
Security - 5 Yr. Absolute Resilience			5 Yr. Absolute Resilience		5 Yr. Absolute Resilience		5 Yr. Absolute Resilience		5 Yr. Absolute Resilience		5 Yr. Absolute Resilience		5 Yr. Absolute Resilience		5 Yr. Absolute Resilience		5 Yr. Absolute Resilience	
ACCESSORY OPTIONS (ordered at initial purchase or at a later time)																		
Port Replicator - Port Replicator			Desktop Dock Latitude 12 Rugged		Docking Station - WD19S 130W		Docking Station - WD19S 130W		Docking Station - WD19S 130W		Docking Station - WD19S 130W		Docking Station - WD19S 130W		Docking Station - WD19S 130W		Docking Station - WD19S 130W	
Port Replicator - Port Replicator			Universal Dock - D6000S		iO Module													
Port Replicator - Port Replicator			Rugged Display Port Desk Dock															
Display Adapter - USB to VGA					USB-C to VGA		USB-C to VGA		USB-C to VGA		USB-C to VGA		USB-C to VGA		USB-C to VGA		USB-C to VGA	
Display Adapter - USB to DisplayPort					USB-C to DisplayPort		USB-C to DisplayPort		USB-C to DisplayPort		USB-C to DisplayPort		USB-C to DisplayPort		USB-C to DisplayPort		USB-C to DisplayPort	
Display Adapter - USB to HDMI					USB-C to HDMI		USB-C to HDMI		USB-C to HDMI		USB-C to HDMI		USB-C to HDMI		USB-C to HDMI		USB-C to HDMI	
Display Adapter - miniDisplayPort to VGA																		
Display Adapter - miniDisplayPort to DisplayPort																		
Display Adapter - miniDisplayPort to HDMI																		
Display Adapter - DisplayPort to VGA																		
Display Adapter - DisplayPort to HDMI																		
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Display Adapter																		

HP LAPTOPS

	CONFIGURATION 1	CONFIGURATION 2	CONFIGURATION 3	CONFIGURATION 4	CONFIGURATION 5	CONFIGURATION 6	CONFIGURATION 7	CONFIGURATION 8	CONFIGURATION 9	CONFIGURATION 10	CONFIGURATION 11	CONFIGURATION 12	CONFIGURATION 13	CONFIGURATION 14	CONFIGURATION 15	CONFIGURATION 16	CONFIGURATION 17	CONFIGURATION 18
	10" TABLET	10" SEMI-RUGGED TABLET	12" CHROMEBOOK	12" CONVERTIBLE BUSINESS LAPTOP	12" CONVERTIBLE PERFORMANCE LAPTOP	12" 2-IN-1 BUSINESS TABLET	12" 2-IN-1 PERFORMANCE TABLET	14" CHROMEBOOK	14" BUSINESS LAPTOP	14" PERFORMANCE LAPTOP	14" 2-IN-1 BUSINESS TABLET	14" 2-IN-1 PERFORMANCE TABLET	14" SEMI-RUGGED LAPTOP	15" BUSINESS LAPTOP	15" PERFORMANCE LAPTOP	15" WORKSTATION LAPTOP	17" PERFORMANCE LAPTOP	17" WORKSTATION LAPTOP
Golden Star Technology MA-IS-2240253																		
Model	No Offering	No Offering	No Offering	EliteBook x360 830 G9	EliteBook x360 830 G9	No Offering	No Offering	Pro c640 G2 Chromebook	ProBook 640 G9	ProBook 640 G9	EliteBook x360 1040 G9	EliteBook x360 1040 G9	No Offering	ProBook 650 G9	ProBook 650 G9	No Offering	No Offering	No Offering
Cost	No Offering	No Offering	No Offering	\$1,485.00	\$1,699.00	No Offering	No Offering	\$1,010.00	\$1,210.00	\$1,480.00	\$1,652.00	\$1,879.00	No Offering	\$1,285.00	\$1,520.00	No Offering	No Offering	No Offering
Features	No Offering	No Offering	No Offering	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details
Weight (lbs. including battery)	-	-	-	2.9	2.9	-	-	3.35	3.35	3.35	3.35	3.35	-	2.9	2.9	-	-	-
Display Size	-	-	-	13.3 Inch WUXGA Touchscreen	13.3 Inch WUXGA Touchscreen	-	-	14 Inch FHD Wide Screen	14 Inch FHD Wide Screen	14 Inch FHD Wide Screen	14 Inch WUXGA Touchscreen	14 Inch WUXGA Touchscreen	-	15.6 Inch FHD Wide Screen	15.6 Inch FHD Wide Screen	-	-	-
Processor	-	-	-	Intel Core i7 1265U	Intel Core i5 1245U	-	-	Intel Core i5 1245U	Intel Core i7 1265U	Intel Core i5 1245U	Intel Core i5 1245U	Intel Core i5 1245U	-	Intel Core i5 1245P	Intel Core i7 1280P	-	-	-
BIOS Configuration	-	-	-	1.80GHz; 12M; 10 Core; 12 Thread	1.80GHz; 12M; 10 Core; 12 Thread	-	-	1.80GHz; 12M; 10 Core; 12 Thread	1.80GHz; 12M; 10 Core; 12 Thread	1.80GHz; 12M; 10 Core; 12 Thread	1.80GHz; 12M; 10 Core; 12 Thread	1.80GHz; 12M; 10 Core; 12 Thread	-	1.70GHz; 12M; 12 Core; 16 Thread	1.80GHz; 12M; 14 Core; 20 Thread	-	-	-
Operating System	-	-	-	Boot to Hard Drive	Boot to Hard Drive	-	-	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	-	Boot to Hard Drive	Boot to Hard Drive	-	-	-
RAM	-	-	-	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	-	-	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	-	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	-	-	-
Hard Disk	-	-	-	16GB DDR4 non-ECC	16GB DDR4 non-ECC	-	-	16GB DDR4 non-ECC	16GB DDR4 non-ECC	16GB DDR4 non-ECC	16GB DDR4 non-ECC	16GB DDR4 non-ECC	-	16GB DDR4 non-ECC	16GB DDR4 non-ECC	-	-	-
Removable Storage	-	-	-	256GB PCIe non-OPAL	512GB PCIe non-OPAL	-	-	256GB PCIe non-OPAL	512GB PCIe non-OPAL	512GB PCIe non-OPAL	512GB PCIe non-OPAL	512GB PCIe non-OPAL	-	256GB PCIe non-OPAL	512GB PCIe non-OPAL	-	-	-
Video Graphics	-	-	-	Intel Iris Xe Graphics	Intel Iris Xe Graphics	-	-	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	-	Intel Iris Xe Graphics	Intel Iris Xe Graphics	-	-	-
Web Camera	-	-	-	Front IR	Front IR	-	-	Front IR	Front IR	Front IR	Front IR	Front IR	-	Front IR	Front IR	-	-	-
Sound	-	-	-	Bang & Olufsen	Bang & Olufsen	-	-	Bang & Olufsen	Bang & Olufsen	Bang & Olufsen	Bang & Olufsen	Bang & Olufsen	-	Bang & Olufsen	Bang & Olufsen	-	-	-
Network Interface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Broadband Interface	-	-	-	Intel R22 11 AX	Intel R22 11 AX	-	-	Intel R22 11 AX	Intel R22 11 AX	Intel R22 11 AX	Intel R22 11 AX	Intel R22 11 AX	-	Intel R22 11 AX	Intel R22 11 AX	-	-	-
Wireless Interface	-	-	-	5.2	5.2	-	-	5	5	5	5	5	-	5.2	5.2	-	-	-
Bluetooth Interface	-	-	-	Yes	Yes	-	-	Intel vPro	Intel vPro	Yes	Yes	Yes	-	Yes	Yes	-	-	-
Biometrics	-	-	-	Intel vPro	Intel vPro	-	-	Intel vPro	Intel vPro	Intel vPro	Intel vPro	Intel vPro	-	Intel vPro	Intel vPro	-	-	-
Security	-	-	-	8	8	-	-	7	8	8	8	8	-	8	8	-	-	-
EnergyStar Level	-	-	-	Gold	Gold	-	-	Gold	Gold	Gold	Gold	Gold	-	Gold	Gold	-	-	-
ePEAT Level	-	-	-	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	-	-	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	-	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	-	-	-
Battery Warranty	-	-	-	3 Year; 1 Time Replacement Touchscreen / Touchpad	3 Year; 1 Time Replacement Touchscreen / Touchpad	-	-	3 Year; 1 Time Replacement Touchscreen / Touchpad	3 Year; 1 Time Replacement Touchscreen / Touchpad	3 Year; 1 Time Replacement Touchscreen / Touchpad	3 Year; 1 Time Replacement Touchscreen / Touchpad	3 Year; 1 Time Replacement Touchscreen / Touchpad	-	3 Year; 1 Time Replacement Touchscreen / Touchpad	3 Year; 1 Time Replacement Touchscreen / Touchpad	-	-	-
Mouse (Touchpad / Touchstick)	-	-	-	63 Keys	63 Keys	-	-	77 Keys	63 Keys	65 Keys	63 Keys	63 Keys	-	101 Keys	101 Keys	-	-	-
Keyboard Type (Phys./Virt./# keys)	-	-	-	32GB non-ECC	32GB non-ECC	-	-	16GB non-ECC	64GB non-ECC	64GB non-ECC	64GB non-ECC	64GB non-ECC	-	64GB non-ECC	64GB non-ECC	-	-	-
RAM	-	-	-	RAM Maximum	RAM Maximum	-	-	RAM Maximum	RAM Maximum	RAM Maximum	RAM Maximum	RAM Maximum	-	RAM Maximum	RAM Maximum	-	-	-
Media Card Slots	-	-	-	UltraSD	UltraSD	-	-	MicroSD	MicroSD	MicroSD	MicroSD	MicroSD	-	MicroSD	MicroSD	-	-	-
USB Ports - Rear (2 / 3 / 0 / C)	-	-	-	3.1 (2) / C (2)	3.1 (2) / C (2)	-	-	3.1 (3) / C (1)	3.1 (3) / C (1)	3.1 (3) / C (1)	3.1 (3) / C (2)	3.1 (3) / C (2)	-	3.1 (3) / C (2)	3.1 (3) / C (1)	-	-	-
Maximum Supported Video Resolution	-	-	-	3840 x 2160	3840 x 2160	-	-	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1200	-	1920 x 1080	1920 x 1080	-	-	-
Serial Port (Pin, 16550)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VGA Out	-	-	-	1	1	-	-	1	1	1	1	1	-	1	1	-	-	-
HDMI Out	-	-	-	1	1	-	-	1	1	1	1	1	-	1	1	-	-	-
DisplayPort Out	-	-	-	Yes	Yes	-	-	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	-	-	-
Headphone/Speaker Line Out	-	-	-	Yes	Yes	-	-	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	-	-	-
Accelerometer	-	-	-	Yes	Yes	-	-	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	-	-	-
GPS position	-	-	-	via WWAN	via WWAN	-	-	via WWAN	via WWAN	via WWAN	via WWAN	via WWAN	-	via WWAN	via WWAN	-	-	-
e-Compass	-	-	-	Yes	Yes	-	-	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	-	-	-
Gyro	-	-	-	Yes	Yes	-	-	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	-	-	-
Battery Type (Cell)	-	-	-	3 Cell	3 Cell	-	-	3 Cell	3 Cell	3 Cell	3 Cell	3 Cell	-	3 Cell	3 Cell	-	-	-
Expected Battery life (Hours)	-	-	-	22	22	-	-	15	17	17	17	17	-	15	15	-	-	-
Recharge Time (Hours)	-	-	-	1	1	-	-	1	1	1	1	1	-	1	1	-	-	-
AC Adapter (Watts)	-	-	-	65	65	-	-	65	65	65	65	65	-	65	65	-	-	-
Cable Lock Slot	-	-	-	Yes	Yes	-	-	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	-	-	-
Acoustics (max dB)	-	-	-	2.6	2.6	-	-	4.2	4.2	4.2	4.2	4.2	-	3.1	3.1	-	-	-
Dimensions (inches W x D x H)	-	-	-	11.81 x 8.51 x 0.76	11.81 x 8.51 x 0.76	-	-	12.8 x 8.07 x 0.65	11.81 x 8.51 x 0.76	11.81 x 8.51 x 0.76	12.43 x 8.89 x 0.71	12.43 x 8.89 x 0.71	-	14.15 x 9.2 x 0.78	14.15 x 9.2 x 0.78	-	-	-
UPGRADE OPTIONS (to be ordered at initial purchase)																		
Display - FHD/Outdoor/Backlit/Security	-	-	-	SureView Privacy Screen/Keyboard	SureView Privacy Screen/Keyboard	-	-	SureView Privacy Screen/Keyboard	SureView Privacy Screen/Keyboard	SureView Privacy Screen/Keyboard	SureView Privacy Screen/Keyboard	SureView Privacy Screen/Keyboard	-	SureView Privacy Screen/Keyboard	SureView Privacy Screen/Keyboard	-	-	-
Display - FHD/Outdoor/Backlit/Security	-	-	-	400Nits WUXGA Touchscreen	400Nits WUXGA Touchscreen	-	-	400Nits FHD Wide Screen	400Nits FHD Wide Screen	400Nits FHD Wide Screen	400Nits FHD Wide Screen	400Nits FHD Wide Screen	-	400Nits WUXGA Wide Screen	400Nits WUXGA Wide Screen	-	-	-
Display - FHD/Outdoor/Backlit/Security	-	-	-	-	-	-	-	Chrome Ent. Mgmt. Perpetual	-	-	-	-	-	-	-	-	-	-
Operating System - Chrome Ent. Mgmt. - 1Yr Lic.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAM - 8GB non-ECC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAM - 16GB non-ECC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAM - 32GB non-ECC	-	-	-	-	-	-	-	32GB non-ECC	32GB non-ECC	32GB non-ECC	32GB non-ECC	32GB non-ECC	-	32GB non-ECC	32GB non-ECC	-	-	-
RAM - 64GB non-ECC	-	-	-	-	-	-	-	64GB non-ECC	64GB non-ECC	64GB non-ECC	64GB non-ECC	64GB non-ECC	-	64GB non-ECC	64GB non-ECC	-	-	-
RAM - 32GB ECC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAM - 64GB ECC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RAM - 128GB ECC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solid State Drive - 64GB mSATA non-OPAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solid State Drive - 64GB PCIe non-OPAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solid State Drive - 128GB PCIe non-OPAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solid State Drive - 256GB PCIe non-OPAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solid State Drive - 512GB PCIe non-OPAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solid State Drive - 1TB PCIe non-OPAL	-	-	-	512GB PCIe non-OPAL	1TB PCIe non-OPAL	-	-	512GB PCIe non-OPAL	1TB PCIe non-OPAL	1TB PCIe non-OPAL	512GB PCIe non-OPAL	1TB PCIe non-OPAL	-	512GB PCIe non-OPAL	1TB PCIe non-OPAL	-	-	-
Solid State Drive - 2TB PCIe non-OPAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2nd Solid State Drive - 2TB PCIe non-OPAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Video Graphics - AMD / nVidia w/4GB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Video Graphics - AMD / nVidia w/8GB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Video Graphics - AMD / nVidia w/16GB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Battery (Replacement) - Battery Replacement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Battery (Replacement) - Battery Replacement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Broadband (Built-in) - Gobi w/4G-LTE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Broadband (Built-in) - AT&T w/4G-LTE	-	-	-	Intel XMM 7560R+ LTE-Adv. Pro AT&T	Intel XMM 7560R+ LTE-Adv. Pro AT&T	-	-	Intel XMM 7560R+ LTE-Adv. Pro AT&T	Intel XMM 7560R+ LTE-Adv. Pro AT&T	Intel XMM 7560R+ LTE-Adv. Pro AT&T	Intel XMM 7560R+ LTE-Adv. Pro AT&T	Intel XMM 7560R+ LTE-Adv. Pro AT&T	-	Intel XMM 7560R+ LTE-Adv. Pro AT&T	Intel XMM 7560R+ LTE-Adv. Pro AT&T	-	-	-
Broadband (Built-in) - Verizon w/4G-LTE	-	-	-	Intel XMM 7560R+ LTE-Adv. Pro Verizon	Intel XMM 7560R+ LTE-Adv. Pro Verizon	-	-	Intel XMM 7560R+ LTE-Adv. Pro Verizon	Intel XMM 7560R+ LTE-Adv. Pro Verizon	Intel XMM 7560R+ LTE-Adv. Pro Verizon	Intel XMM 7560R+ LTE-Adv. Pro Verizon	Intel XMM 7560R+ LTE-Adv. Pro Verizon	-	Intel XMM 7560R+ LTE-Adv. Pro Verizon	Intel XMM 7560R+ LTE-Adv. Pro Verizon	-	-	-
Modem (Built-in) - 56K v.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Security - 3 Yr. Absolute Resilience	-	-	-	3 Yr. Absolute Resilience	3 Yr. Absolute Resilience	-	-	3 Yr. Absolute Resilience	3 Yr. Absolute Resilience	3 Yr. Absolute Resilience	3 Yr. Absolute Resilience	3 Yr. Absolute Resilience	-	3 Yr. Absolute Resilience	3 Yr. Absolute Resilience	-	-	-
Security - 4 Yr. Absolute Resilience	-	-	-	4 Yr. Absolute Resilience	4 Yr. Absolute Resilience	-	-	4 Yr. Absolute Resilience	4 Yr. Absolute Resilience	4 Yr. Absolute Resilience	4 Yr. Absolute Resilience	4 Yr. Absolute Resilience	-	4 Yr. Absolute Resilience	4 Yr. Absolute Resilience	-	-	-
Security - 5 Yr. Absolute Resilience	-	-	-	5 Yr. Absolute Resilience	5 Yr. Absolute Resilience	-	-	5 Yr. Absolute Resilience	5 Yr. Absolute Resilience	5 Yr. Absolute Resilience	5 Yr. Absolute Resilience	5 Yr. Absolute Resilience	-	5 Yr. Absolute Resilience	5 Yr. Absolute Resilience	-	-	-
ACCESSORY OPTIONS (ordered at initial purchase or at a later time)																		
Port Replicator - Port Replicator	-	-	-	USB-C Dock G5	USB-C Dock G5	-	-	USB-C Universal Dock G2	USB-C Dock G5	USB-C Dock G5	USB-C Dock G5	USB-C Dock G5	-	USB-C Dock G5	USB-C Dock G5	-	-	-
Port Replicator - Port Replicator	-	-	-	Mini Travel Dock	Mini Travel Dock	-	-	Mini Travel Dock	Mini Travel Dock	Mini Travel Dock	Mini Travel Dock	Mini Travel Dock	-	Mini Travel Dock	Mini Travel Dock	-	-	-
Port Replicator - Port Replicator	-	-	-	Travel Hub G2	Travel Hub G2	-	-	Travel Hub G2	Travel Hub G2	Travel Hub G2	Travel Hub G2	Travel Hub G2	-	Travel Hub G2	Travel Hub G2	-	-	-
Display Adapter - USB to VGA	-	-	-	USB-C to VGA	USB-C to VGA	-	-	USB-C to VGA	USB-C to VGA	USB-C to VGA	USB-C to VGA	USB-C to VGA	-	USB-C to VGA	USB-C to VGA	-	-	-
Display Adapter - USB to DisplayPort	-	-	-	USB-C to DisplayPort	USB-C to DisplayPort	-	-	USB-C to DisplayPort	USB-C to DisplayPort	USB-C to DisplayPort	USB-C to DisplayPort	USB-C to DisplayPort	-	USB-C to DisplayPort	USB-C			

LENOVO LAPTOPS

	CONFIGURATION 1	CONFIGURATION 2	CONFIGURATION 3	CONFIGURATION 4	CONFIGURATION 5	CONFIGURATION 6	CONFIGURATION 7	CONFIGURATION 8	CONFIGURATION 9	CONFIGURATION 10	CONFIGURATION 11	CONFIGURATION 12	CONFIGURATION 13	CONFIGURATION 14	CONFIGURATION 15	CONFIGURATION 16	CONFIGURATION 17	CONFIGURATION 18
	10" TABLET	10" SEMI-RUGGED TABLET	12" CHROMEBOOK	12" CONVERTIBLE BUSINESS LAPTOP	12" CONVERTIBLE PERFORMANCE LAPTOP	12" 2-IN-1 BUSINESS TABLET	12" 2-IN-1 PERFORMANCE TABLET	14" CHROMEBOOK	14" BUSINESS LAPTOP	14" PERFORMANCE LAPTOP	14" 2-IN-1 BUSINESS TABLET	14" 2-IN-1 PERFORMANCE TABLET	14" SEMI-RUGGED LAPTOP	15" BUSINESS LAPTOP	15" PERFORMANCE LAPTOP	15" WORKSTATION LAPTOP	17" PERFORMANCE LAPTOP	17" WORKSTATION LAPTOP
Technology Integration Group MA-IS-2240254																		
Model	ThinkPad X12	No Offering	100e Chromebook	ThinkPad L13 Yoga Gen 3	ThinkPad X13 Yoga Gen 3	ThinkPad L13 Yoga Gen 3	ThinkPad X13 Yoga Gen 3	14e Chromebook	ThinkPad L14 Gen 3	ThinkPad L14 Gen 3	ThinkPad X1 Yoga Gen 7	ThinkPad X1 Yoga Gen 7	ThinkPad T14 Gen 3	ThinkPad L15 Gen 3	ThinkPad T16 Gen 1	ThinkPad P1 Gen 5	ThinkPad P16 Gen 1	No Offering
Cost	\$1,536.99	No Offering	\$428.99	\$1,466.99	\$1,857.99	\$1,466.99	\$1,857.99	\$1,099.99	\$1,325.99	\$1,553.99	\$1,825.99	\$2,031.99	\$1,433.99	\$1,379.99	\$1,781.99	\$2,585.99	\$2,401.99	No Offering
Features	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details
Weight (lbs. including battery)	1.67	2.65	2.9	2.9	2.9	2.9	2.9	3.5	3.5	3.5	3	2.65	3.87	3.61	3.59	6.5	6.5	
Display Size	12.1 inch FHD+ Touchscreen	12.1 inch FHD+ Touchscreen	11.6 inch FHD Wide Screen	13.3 inch FHD Touchscreen	13.3 inch FHD Touchscreen	13.3 inch FHD Touchscreen	13.3 inch FHD Touchscreen	14 inch FHD Wide Screen	14 inch FHD Wide Screen	14 inch FHD Wide Screen	14 inch FHD Touchscreen	14 inch FHD Touchscreen	14 inch FHD Wide Screen	15.6 inch FHD Wide Screen	16 inch FHD Wide Screen	16 inch FHD Wide Screen	16 inch FHD Wide Screen	
Processor	Intel Core i3 1110G4 150GHz, 8M, 2 Core, 4 Thread	AMD 3015e 1.20GHz, 12M, 2 Core, 4 Thread	AMD 3015e 1.20GHz, 8M, 2 Core, 4 Thread	Intel Core i5 1245U 1.80GHz, 12M, 10 Core, 12 Thread	Intel Core i7 1265U 1.80GHz, 12M, 10 Core, 12 Thread	Intel Core i5 1245U 1.60GHz, 12M, 10 Core, 12 Thread	Intel Core i7 1265U 1.80GHz, 12M, 10 Core, 12 Thread	AMD 3015e 1.60GHz, 12M, 10 Core, 12 Thread	Intel Core i5 1245U 1.80GHz, 12M, 10 Core, 12 Thread	Intel Core i7 1265U 1.80GHz, 12M, 10 Core, 12 Thread	Intel Core i5 1245U 1.60GHz, 12M, 10 Core, 12 Thread	Intel Core i7 1265U 1.80GHz, 12M, 10 Core, 12 Thread	Intel Core i5 1245U 1.60GHz, 12M, 10 Core, 12 Thread	Intel Core i5 1250P 1.80GHz, 12M, 14 Core, 20 Thread	Intel Core i7 1280P 2.50GHz, 24M, 14 Core, 20 Thread	Intel Core i9 12900H 2.40GHz, 24M, 14 Core, 20 Thread	Intel Core i7 12800H 2.40GHz, 24M, 14 Core, 20 Thread	
BIOS Configuration	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	
Operating System	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Chrome	Chrome	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Chrome	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	
RAM	16GB DDR3 non-ECC	4GB DDR4 non-ECC	32GB eMMC non-OPAL	16GB DDR3 non-ECC	16GB DDR3 non-ECC	16GB DDR3 non-ECC	16GB DDR3 non-ECC	8GB DDR4 non-ECC	16GB DDR3 non-ECC	16GB DDR3 non-ECC	16GB DDR3 non-ECC	16GB DDR3 non-ECC	16GB DDR3 non-ECC	16GB DDR3 non-ECC	16GB DDR3 non-ECC	16GB DDR3 non-ECC	16GB DDR3 non-ECC	
Hard Disk	256GB PCIe non-OPAL	32GB eMMC non-OPAL	32GB eMMC non-OPAL	256GB PCIe non-OPAL	512GB PCIe non-OPAL	256GB PCIe non-OPAL	512GB PCIe non-OPAL	64GB eMMC non-OPAL	256GB PCIe non-OPAL	512GB PCIe non-OPAL	256GB PCIe non-OPAL	512GB PCIe non-OPAL	256GB PCIe non-OPAL	256GB PCIe non-OPAL	512GB PCIe non-OPAL	1TB PCIe non-OPAL	512GB PCIe non-OPAL	
Removable Storage																		
Video Graphics	Intel UHD Graphics	AMD Radeon Graphics	AMD Radeon Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	AMD Radeon R4	Intel Iris Xe Graphics	nVidia GeForce MX550 w/2GB	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	nVidia GeForce MX550 w/2GB	nVidia Quadro T1200 w/4GB	nVidia Quadro T1200 w/4GB	
Web Camera	Front IR	Front IR	Front IR	Front IR	Front IR	Front IR	Front IR	Front IR	Front IR	Front IR	Front IR	Front IR	Front IR	Front IR	Front IR	Front IR	Front IR	
Sound	High Definition Audio	High Definition Audio	High Definition Audio	High Definition Audio	High Definition Audio	High Definition Audio	High Definition Audio	High Definition Audio	High Definition Audio	High Definition Audio	High Definition Audio	High Definition Audio	High Definition Audio	High Definition Audio	High Definition Audio	High Definition Audio	High Definition Audio	
Network Interface																		
Wireless Interface	802.11 AX	802.11 AX	802.11 AC	Intel 802.11 AX	Intel 802.11 AX	Intel 802.11 AX	Intel 802.11 AX	802.11 AC	Intel 802.11 AX	Intel 802.11 AX	Intel 802.11 AX	Intel 802.11 AX	Intel 802.11 AX	Intel 802.11 AX	Intel 802.11 AX	Intel 802.11 AX	Intel 802.11 AX	
Bluetooth Interface	5.1	5	5	5	5	5	5	5	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	
Biometrics	Yes								Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Security				Intel vPro	Intel vPro	Intel vPro	Intel vPro	Intel vPro	Intel vPro	Intel vPro	Intel vPro	Intel vPro	Intel vPro	Intel vPro	Intel vPro	Intel vPro	Intel vPro	
EnergyStar Level	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	
ePEAT Level	Silver	Silver	Silver	Silver	Silver	Silver	Silver	Silver	Silver	Silver	Silver	Silver	Silver	Silver	Silver	Silver	Silver	
Main Warranty	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	4 Year NBD Onsite (Accidental Damage, Keep Your HD)	
Battery Warranty	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	3 Year, 1 Time Replacement	
Mouse (Touchpad / Touchsticks)	Touchscreen	Touchscreen	Touchscreen	Touchscreen	Touchscreen	Touchscreen	Touchscreen	Touchscreen	Touchscreen	Touchscreen	Touchscreen	Touchscreen	Touchscreen	Touchscreen	Touchscreen	Touchscreen	Touchscreen	
Keyboard Type (Phys/Virt/# keys)	Virtual	Virtual	Virtual	66 Keys	66 Keys	66 Keys	66 Keys	66 Keys	66 Keys	66 Keys	66 Keys	66 Keys	66 Keys	66 Keys	66 Keys	66 Keys	66 Keys	
RAM Maximum	16GB non-ECC	4GB non-ECC	32GB non-ECC	32GB non-ECC	32GB non-ECC	32GB non-ECC	32GB non-ECC	8GB non-ECC	64GB non-ECC	8GB non-ECC	32GB non-ECC	32GB non-ECC	32GB non-ECC	48GB non-ECC	48GB non-ECC	48GB non-ECC	128GB non-ECC	
Media Card Slots			MicroSD	MicroSD	MicroSD	MicroSD	MicroSD		MicroSD	MicroSD	MicroSD	MicroSD	MicroSD		MicroSD	MicroSD	MicroSD	
USB Ports - Rear (2.0 / 3.0 / C)	3.2 (1) / C (1)	3.2 (1) / C (1)	3.2 (1) / C (1)	3.2 (2) / C (1)	3.2 (2) / C (1)	3.2 (2) / C (1)	3.2 (2) / C (1)	3.2 (2) / C (1)	3.2 (2) / C (1)	3.2 (2) / C (1)	3.2 (2) / C (1)	3.2 (2) / C (1)	3.2 (2) / C (1)	3.2 (2) / C (1)	3.2 (2) / C (1)	3.2 (2) / C (1)	3.2 (2) / C (1)	
Maximum Supported Video Resolution	5120 x 3200	1280 x 768	1280 x 768	3840 x 2840	3840 x 2840	3840 x 2840	3840 x 2840	1920 x 1080	3840 x 2840	3840 x 2840	3840 x 2840	3840 x 2840	3840 x 2840	3840 x 2840	3840 x 2840	3840 x 2840	3840 x 2840	
Serial Port (9pin, 16550)																		
VGA Out																		
HDMI Out			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
DisplayPort Out																		
Headphone/Speaker Line Out	1																	
Accelerometer	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
GPS position	via WWAN	via WWAN	via WWAN	via WWAN	via WWAN	via WWAN	via WWAN	via WWAN	via WWAN	via WWAN	via WWAN	via WWAN	via WWAN	via WWAN	via WWAN	via WWAN	via WWAN	
e-Compass	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Gyro	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Battery Type (Cell)	3 Cell	3 Cell	3 Cell	4 Cell	4 Cell	4 Cell	4 Cell	3 Cell	3 Cell	3 Cell	3 Cell	4 Cell	4 Cell	4 Cell	4 Cell	4 Cell	4 Cell	
Expected Battery Life (Hours)	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	
Recharge Time (Hours)	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	
AC Adapter (Watts)	45	65	65	65	65	65	65	65	65	65	65	65	65	65	65	170	170	
Cable Lock Slot	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Acoustic (max. dB)	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
Dimensions (inches W x D x H)	11.15 x 8.01 x 0.35		11.4 x 7.95 x 0.78	12.26 x 8.42 x 0.69	12.0 x 8.42 x 0.61	12.26 x 8.62 x 0.69	12.03 x 8.42 x 0.61	12.91 x 8.86 x 0.70	13.03 x 8.25 x 0.75	13.03 x 8.25 x 0.75	12.38 x 8.75 x 0.61	12.38 x 8.75 x 0.61	12.38 x 8.75 x 0.61	14.18 x 9.53 x 0.78	14.25 x 10.06 x 0.81	14.15 x 9.53 x 0.70	14.25 x 10.06 x 0.82	
UPGRADE OPTIONS (to be ordered at initial purchase)																		
Display - FHD/Outdoor/Backlit/Security	Detachable Privacy Filter			ePrivacy Screen	ePrivacy Screen	ePrivacy Screen	ePrivacy Screen		FHD 400nits Widescreen	FHD 400nits Widescreen	WUXGA ARAS 400nits Touchscreen	WUXGA ARAS 400nits Touchscreen	FHD 300nits Touchscreen	FHD 300nits Touchscreen	FHD 300nits Touchscreen	WQXGA QHD+	WQXGA QHD+	
Display - FHD/Outdoor/Backlit/Security									FHD Touchscreen	FHD Touchscreen	WUXGA Touchscreen w/ePrivacy	WUXGA Touchscreen w/ePrivacy	FHD 300nits Touchscreen	FHD 300nits Touchscreen	FHD 300nits Touchscreen	WQXGA QHD+	WQXGA QHD+	
Display - FHD/Outdoor/Backlit/Security											WUXGA QLED 300nits Touchscreen	WUXGA QLED 300nits Touchscreen	FHD 300nits Touchscreen	FHD 300nits Touchscreen	FHD 300nits Touchscreen	WQXGA QHD+	WQXGA QHD+	
Operating System - Chrome Ent. Mgmt. - 1Yr. Lic.		Chrome Ent. Mgmt. 1Yr. Lic.						Chrome Ent. Mgmt. 1Yr. Lic.								WUXGA QHD+	WUXGA QHD+	
RAM - 8GB non-ECC																		
RAM - 16GB non-ECC																		
RAM - 32GB non-ECC				32GB non-ECC	32GB non-ECC	32GB non-ECC	32GB non-ECC	32GB non-ECC	32GB non-ECC	32GB non-ECC	32GB non-ECC	32GB non-ECC	32GB non-ECC	32GB non-ECC	32GB non-ECC	32GB non-ECC	32GB non-ECC	
RAM - 64GB ECC																		
RAM - 128GB ECC																		
Solid State Drive - 64GB eMMC non-OPAL																		
Solid State Drive - 64GB PCIe non-OPAL																		
Solid State Drive - 128GB PCIe non-OPAL																		
Solid State Drive - 256GB PCIe non-OPAL																		
Solid State Drive - 512GB PCIe non-OPAL	512GB PCIe non-OPAL			512GB PCIe non-OPAL	512GB PCIe non-OPAL	512GB PCIe non-OPAL	512GB PCIe non-OPAL	512GB PCIe non-OPAL	512GB PCIe non-OPAL	512GB PCIe non-OPAL	512GB PCIe non-OPAL	512GB PCIe non-OPAL	512GB PCIe non-OPAL	512GB PCIe non-OPAL	512GB PCIe non-OPAL	512GB PCIe non-OPAL	512GB PCIe non-OPAL	
Solid State Drive - 1TB PCIe non-OPAL	1TB PCIe non-OPAL			1TB PCIe non-OPAL	1TB PCIe non-OPAL	1TB PCIe non-OPAL	1TB PCIe non-OPAL	1TB PCIe non-OPAL	1TB PCIe non-OPAL	1TB PCIe non-OPAL	1TB PCIe non-OPAL	1TB PCIe non-OPAL	1TB PCIe non-OPAL	1TB PCIe non-OPAL	1TB PCIe non-OPAL	1TB PCIe non-OPAL	1TB PCIe non-OPAL	
Solid State Drive - 2TB PCIe non-OPAL											2TB PCIe non-OPAL	2TB PCIe non-OPAL	2TB PCIe non-OPAL	2TB PCIe non-OPAL	2TB PCIe non-OPAL	2TB PCIe non-OPAL	2TB PCIe non-OPAL	
2nd Solid State Drive - 2TB PCIe non-OPAL																		
Video Graphics - AMD / nVidia w/2GB										nVidia GeForce MX550 w/2GB					nVidia GeForce MX550 w/2GB	nVidia Quadro RTX A2000 w/8GB	nVidia Quadro RTX A2000 w/8GB	
Video Graphics - AMD / nVidia w/4GB															nVidia GeForce RTX 2050 w/4GB	nVidia Quadro RTX 3080 Ti w/16GB	nVidia Quadro RTX 3080 Ti w/16GB	
Video Graphics - AMD / nVidia w/8GB																		
Battery (Replacement) - Battery Replacement								57Whr Battery	57Whr Battery	57Whr Battery				80Whr Battery	80Whr Battery	80Whr Battery	80Whr Battery	
Battery (Replacement) - Battery Replacement								63Whr Battery	63Whr Battery	63Whr Battery								
Broadband (																		

MICROSOFT LAPTOPS

Zones LLC MA-IS-2240255	CONFIGURATION 1	CONFIGURATION 2	CONFIGURATION 3	CONFIGURATION 4	CONFIGURATION 5	CONFIGURATION 6	CONFIGURATION 7	CONFIGURATION 8	CONFIGURATION 9	CONFIGURATION 10	CONFIGURATION 11	CONFIGURATION 12	CONFIGURATION 13	CONFIGURATION 14	CONFIGURATION 15	CONFIGURATION 16	CONFIGURATION 17	CONFIGURATION 18
	10" TABLET	10" SEMI-RUGGED TABLET	12" CHROMEBOOK	12" CONVERTIBLE BUSINESS LAPTOP	12" CONVERTIBLE PERFORMANCE LAPTOP	12" 2-IN-1 BUSINESS TABLET	12" 2-IN-1 PERFORMANCE TABLET	14" CHROMEBOOK	14" BUSINESS LAPTOP	14" PERFORMANCE LAPTOP	14" 2-IN-1 BUSINESS TABLET	14" 2-IN-1 PERFORMANCE TABLET	14" SEMI-RUGGED LAPTOP	15" BUSINESS LAPTOP	15" PERFORMANCE LAPTOP	15" WORKSTATION LAPTOP	17" PERFORMANCE LAPTOP	17" WORKSTATION LAPTOP
																		
Model	Surface Go 3	No Offering	No Offering	Surface Laptop Go	No Offering	Surface Pro 8	Surface Pro 8	No Offering	Surface Laptop 4	Surface Laptop 4	Surface Laptop Studio	Surface Laptop Studio	No Offering	No Offering	Surface Laptop 4	No Offering	No Offering	No Offering
Cost	\$895.10	No Offering	No Offering	\$1,147.20	No Offering	\$1,377.75	\$1,690.65	No Offering	\$1,388.25	\$1,571.75	\$1,678.20	\$2,050.25	No Offering	No Offering	\$1,686.90	No Offering	No Offering	No Offering
Features	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details	Product Details
Weight (lbs. including battery)	1.2			2.45		1.56	1.56		2.84	2.84	3.84	3.84			3.4			
Display Size	10.5 inch FHD Touchscreen			12.4 inch FHD Touchscreen		13 inch FHD Touchscreen	13 inch FHD Touchscreen		13.5 inch FHD Touchscreen	13.5 inch FHD Touchscreen	14.4 inch FHD Touchscreen	14.4 inch FHD Touchscreen			15 inch FHD Touchscreen			
Processor	Intel Core i5 10100Y 1.30GHz, 4M, 2 Core, 4 Thread			Intel Core i5 1035G1 1.0GHz, 8M, 4 Core, 8 Thread		Intel Core i5 1145G7 2.60GHz, 8M, 4 Core, 8 Thread	Intel Core i7 1185G7 3.0GHz, 12M, 4 Core, 8 Thread		Intel Core i5 1145G7 2.60GHz, 8M, 4 Core, 8 Thread	Intel Core i7 1185G7 3.0GHz, 12M, 4 Core, 8 Thread	Intel Core i5 11300H 2.60GHz, 8M, 4 Core, 8 Thread	Intel Core i7 11370H 3.0GHz, 12M, 4 Core, 8 Thread			Intel Core i7 1185G7 3.0GHz, 12M, 4 Core, 8 Thread			
BIOS Configuration	Boot to Hard Drive			Boot to Hard Drive		Boot to Hard Drive	Boot to Hard Drive		Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive	Boot to Hard Drive			Boot to Hard Drive			
Operating System	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit			Windows 10 Pro 64Bit		Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit		Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit	Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit			Windows 11 Pro 64Bit downgradable to Windows 10 Pro 64Bit			
RAM	16GB DDR4 non-ECC			16GB DDR4 non-ECC		16GB DDR4 non-ECC	16GB DDR4 non-ECC		16GB DDR4 non-ECC	16GB DDR4 non-ECC	16GB DDR4 non-ECC	16GB DDR4 non-ECC			16GB DDR4 non-ECC			
Hard Disk	256GB PCIe non-OPAL			256GB PCIe non-OPAL		256GB PCIe non-OPAL	512GB PCIe non-OPAL		256GB PCIe non-OPAL	256GB PCIe non-OPAL	256GB PCIe non-OPAL	512GB PCIe non-OPAL			512GB PCIe non-OPAL			
Removable Storage																		
Video Graphics	Intel HD Graphics 615			Intel UHD Graphics		Intel Iris Xe Graphics	Intel Iris Xe Graphics		Intel Iris Xe Graphics	Intel Iris Xe Graphics	Intel Iris Xe Graphics	nVidia GeForce RTX 3050 Ti w/4GB			Intel Iris Xe Graphics			
Web Camera	Front IR			Front IR		Front IR	Front IR		Front IR	Front IR	Front IR	Front IR			Front IR			
Sound	Dolby Audio			Dolby Audio		Dolby Audio	Dolby Audio		Dolby Atmos	Dolby Atmos	Dolby Atmos	Dolby Atmos			Dolby Atmos			
Network Interface																		
Broadband Interface	Gobi LTE Advanced																	
Wireless Interface	802.11 AX			802.11 AX		802.11 AX	802.11 AX		802.11 AX	802.11 AX	802.11 AX	802.11 AX			802.11 AX			
Bluetooth Interface	5			5		5	5		5	5	5	5			5			
Biometrics				Yes														
Security																		
EnergyStar Level	8			8		8	8		8	8	8	8			8			
ePEAT Level	Gold			Gold		Gold	Gold		Gold	Gold	Gold	Gold			Gold			
Main Warranty	4 Year NBD Replacement (Accidental Damage)			4 Year NBD Replacement (Accidental Damage)		4 Year NBD Replacement (Accidental Damage)	4 Year NBD Replacement (Accidental Damage)		4 Year NBD Replacement (Accidental Damage)	4 Year NBD Replacement (Accidental Damage)	4 Year NBD Replacement (Accidental Damage)	4 Year NBD Replacement (Accidental Damage)			4 Year NBD Replacement (Accidental Damage)			
Battery Warranty	4 Year, 1 Time Replacement (Accidental Damage)			4 Year, 1 Time Replacement (Accidental Damage)		4 Year, 1 Time Replacement (Accidental Damage)	4 Year, 1 Time Replacement (Accidental Damage)		4 Year, 1 Time Replacement (Accidental Damage)	4 Year, 1 Time Replacement (Accidental Damage)	4 Year, 1 Time Replacement (Accidental Damage)	4 Year, 1 Time Replacement (Accidental Damage)			4 Year, 1 Time Replacement (Accidental Damage)			
Mouse (Touchpad / Touchstick)	Touchscreen			Touchscreen		Touchscreen	Touchscreen		Touchscreen / Trackpad	Touchscreen / Trackpad	Touchscreen / Trackpad	Touchscreen / Trackpad			Touchscreen / Trackpad			
Keyboard Type (Pwr/Win/III keys)	Virtual			79 Keys		Virtual	Virtual		86 Keys	86 Keys	79 Keys	79 Keys			86 Keys			
RAM Maximum	16GB non-ECC			16GB non-ECC		32GB non-ECC	32GB non-ECC		32GB non-ECC	32GB non-ECC	32GB non-ECC	32GB non-ECC			32GB non-ECC			
Media Card Slots	C (1)			3.0 (1) / C (1)		C (2)	C (2)		3.0 (1) / C (1)	3.0 (1) / C (1)	C (2)	C (2)			3.0 (1) / C (1)			
USB Ports - Rear (2.0 / 3.0 / C)	3840 x 2160			4096 x 2304		7680 x 4320	7860 x 4320		5120 x 2880	5120 x 2880	7680 x 4320	7680 x 4320			5120 x 2880			
Serial Port (9pin, 16550)																		
VGA Out																		
HDMI Out																		
DisplayPort Out																		
Headphone/Speaker Line Out	1			1		1	1		1	1	1	1			1			
Accelerometer	Yes			Yes		Yes	Yes		Yes	Yes	Yes	Yes			Yes			
GPS position	Yes					Yes	Yes											
e-Compass																		
Gyro	Yes					Yes	Yes		Yes	Yes	Yes	Yes			Yes			
Battery Type (Cell)	2 Cell			4 Cell		4 Cell	4 Cell		10 Cell	10 Cell	6 Cell	6 Cell			10 Cell			
Expected Battery Life (Hours)	13			11		16	16		16.5	16.5	19	19			16.5			
Recharge Time (Hours)	2.5			2.5		1.5	1.5		2.5	2.5	1.5	1.5			2.5			
AC Adapter (Watts)	24			39		65	65		65	65	65	65			65			
Cable Lock Slot																		
Acoustics (max. dB)	Unavailable			32		40	40		35	35	36	36			35			
Dimensions (inches W x D x H)	9.65 x 6.90 x 0.33			10.95 x 8.10 x 0.62		11.3 x 8.2 x 0.37	11.3 x 8.2 x 0.37		12.1 x 8.8 x 0.57	12.1 x 8.8 x 0.57	12.72 x 8.98 x 0.75	12.72 x 8.98 x 0.75			13.4 x 9.6 x 0.58			
UPGRADE OPTIONS (to be ordered at initial purchase)																		
Display - FHD/Outdoor/Backlit/Security																		
Display - FHD/Outdoor/Backlit/Security																		
Display - FHD/Outdoor/Backlit/Security																		
Operating System - Chrome Enterprise Mgmt.																		
RAM - 8GB non-ECC																		
RAM - 16GB non-ECC																		
RAM - 32GB non-ECC							32GB non-ECC / 1TB PCIe non-OPAL			32GB non-ECC / 1TB PCIe non-OPAL		32GB non-ECC / 1TB PCIe non-OPAL			32GB non-ECC / 1TB PCIe non-OPAL			
RAM - 64GB non-ECC																		
RAM - 32GB ECC																		
RAM - 64GB ECC																		
RAM - 128GB ECC																		
Solid State Drive - 64GB eMMC non-OPAL																		
Solid State Drive - 64GB PCIe non-OPAL																		
Solid																		

OPTIONAL SERVICES - LAPTOPS	
SERVICE OPTIONS (to be ordered at initial purchase)	
Optional Service	Specification
Windows AutoPilot Registration	NOTE: County Microsoft Intune is divided into four (4) Tennant Groups. Tennant A is managed by Internal Services Department and includes all departments except: Sheriff, District Attorney, and Board of Supervisors. Tennant B is managed by and for Sheriff. Tennant C is managed by and for District Attorney. Tennant D is managed by and for Board of Supervisors. All work performed for this service including process and procedures must be previously approved and necessary access granted by the specific Tennant Group Manager. Tasks to be provided prior to shipment of equipment include the following: 1) Harvest hardware IDs and register them in Microsoft Intune for Windows AutoPilot. 2) Provide list of registered hardware IDs to department and designated Tennant Group Manager in .CSV format. 3) As directed by department, deliver two (2) devices after hardware ID harvest and registration for verification and acceptance, before proceeding with completing remaining devices.
Windows AutoPilot Pre-Provisioning	NOTE: County Microsoft Intune is divided into four (4) Tennant Groups. Tennant A is managed by Internal Services Department and includes all departments except: Sheriff, District Attorney, and Board of Supervisors. Tennant B is managed by and for Sheriff. Tennant C is managed by and for District Attorney. Tennant D is managed by and for Board of Supervisors. All work performed for this service including process and procedures must be previously approved and necessary access granted by the specific Tennant Group Manager. Tasks to be provided prior to shipment of equipment include the following: 1) Provide list of registered hardware IDs to department and designated Tennant Group Manager in .CSV format. 2) ONLY upon notification by department or designated Tennant Group Manager, perform device connection and complete Windows AutoPilot provisioning. 3) As directed by department, deliver two (2) devices after Windows AutoPilot provisioning for verification and acceptance, before proceeding with completing remaining devices. 4) At direction of department, provide list of registered hardware IDs with date Windows AutoPilot provisioning completion in .CSV format.
Windows AutoPilot Asset Tagging	Tasks to be provided prior to shipment of equipment include the following: 1) Affix asset tag to device as directed and/or provided by the department. 2) Enter asset tag into system BIOS as directed and/or provided by the department. 3) Provide a full inventory report of equipment asset tags, serial numbers, and other identifying information as requested by the department. 4) Coordinate and oversee purchase deliveries as directed by department.
Windows AutoPilot Drop Ship	General County weekday peak hours are 9:00am to 3:00pm; Tuesday to Thursday All delivery/drop times shall be directed by ordering department. Tasks include the following: 1) Dropship individual devices to specific end-user address as directed by department. a) Package must be insured. b) Package delivery must require end-user identification and signature or as directed by department. i) Anyone at location may sign for device delivery. ii) Only specific individual may sign for device delivery. c) Proof of delivery (end-user identification/signature) for each dropship device must be provided along with invoice or as directed by department. 2) Coordinate and oversee each dropship according to department instructions.
Asset Tagging	Tasks to be provided by 3rd party vendor prior to delivery of equipment include the following: 1) Affix asset tag to device as directed and/or provided by the department. 2) Enter asset tag into system BIOS as directed and provided by the department. 3) Provide a full inventory report of equipment asset tags, serial numbers, and other identifying information as requested by the department. 4) Coordinate and oversee all purchase deliveries to a central department location.
Imaging	Tasks to be provided by 3rd party prior to delivery of equipment include the following: 1) Image/install pre-software installation services using a Golden (certified) image/pre-software as provided by the department. a) 3rd Party to provide department an upload link and/or repository for certified image/pre-software. b) At direction of the department, 3rd Party to deliver two (2) devices after imaging to department for verification and acceptance, before proceeding with imaging remaining devices. 2) Coordinate and oversee all purchase deliveries to a central department location.

OPTIONAL SERVICES - LAPTOPS	
SERVICE OPTIONS (to be ordered at initial purchase)	
Optional Service	Specification
Delivery w/Unpacking - WEEKDAY	General County weekday peak hours are 9am to 3:30pm. All delivery/drop times shall be dictated by ordering department. Tasks to include the following: 1) Deliver and unpack devices (removing all packing materials) to regional locations as directed by the department. 2) Coordinate and oversee all purchase deliveries to a central department location.
Delivery w/Unpacking - WEEKEND	General County weekend peak hours are 9am to 3:30pm. All delivery/drop times shall be dictated by ordering department. Tasks to include the following: 1) Deliver and unpack devices (removing all packing materials) to regional locations as directed by the department. 2) Coordinate and oversee all purchase deliveries to a central department location.
Staggered Delivery - WEEKDAY	General County weekday peak hours are 9am to 3:30pm. All delivery/drop times shall be dictated by ordering department. Tasks to include the following: 1) Warehousing of devices up to three (3) months as needed; starts from date goods are warehoused (not from the date of PO) Vendor shall transfer all warranty and title/ownership for devices to the department prior to delivery (F.O.B. Destination). Department takes title/ownership at F.O.B. Destination. 2) Coordinate and oversee all purchase deliveries to regional locations as directed by the department.
Staggered Delivery - WEEKEND	General County weekend peak hours are 9am to 3:30pm. All delivery/drop times shall be dictated by ordering department. Tasks to include the following: 1) Warehousing of devices up to three (3) months as needed; starts from date goods are warehoused (not from the date of PO) Vendor shall transfer all warranty and title/ownership for devices to the department prior to delivery (F.O.B. Destination). Department takes title/ownership at F.O.B. Destination. 2) Coordinate and oversee all purchase deliveries to regional locations as directed by the department.
Staggered Delivery w/Unpacking - WEEKDAY	General County weekday peak hours are 9am to 3:30pm. All delivery/drop times shall be dictated by ordering department. Tasks to include the following: 1) Warehousing of devices up to three (3) months as needed; starts from date goods are warehoused (not from the date of PO) Vendor shall transfer all warranty and title/ownership for devices to the department prior to delivery (F.O.B. Destination). Department takes title/ownership at F.O.B. Destination. 2) Coordinate and oversee the purchase deliveries and unpacking of devices (removing all packing materials) to regional locations as directed by the department.
Staggered Delivery w/Unpacking - WEEKEND	General County weekend peak hours are 9am to 3:30pm. All delivery/drop times shall be dictated by ordering department. Tasks to include the following: 1) Warehousing of devices up to three (3) months as needed; starts from date goods are warehoused (not from the date of PO) Vendor shall transfer all warranty and title/ownership for devices to the department prior to delivery (F.O.B. Destination). Department takes title/ownership at F.O.B. Destination. 2) Coordinate and oversee the purchase deliveries and unpacking of devices (removing all packing materials) to regional locations as directed by the department.

OPTIONAL SERVICES - LAPTOPS	
SERVICE OPTIONS (to be ordered at initial purchase)	
Optional Service	Specification
Install & Relocate - WEEKDAY	General County weekday peak hours are 9am to 3:30pm. All service times shall be dictated by ordering department. Tasks to include the following: 1) Deliver device to final destination within one (1) facility, as directed by the ordering department and unpack, removing all packing material. 2) Disconnect and remove existing equipment to a temporary on-site location as directed by department. 3) Install device including connection of CPU and peripherals, including but not limited to, system cables, security cables/locking mechanism, mouse, and keyboard or as directed by department. 4) Boot up system and report any Operating System issues to department. 5) Coordinate and oversee all purchases deliveries to a central department location.
Install & Relocate - WEEKEND	General County weekend peak hours are 9am to 3:30pm. All service times shall be dictated by ordering department. Tasks to include the following: 1) Deliver device to final destination within one (1) facility, as directed by the ordering department and unpack, removing all packing material. 2) Disconnect and remove existing equipment to a temporary on-site location as directed by department. 3) Install device including connection of CPU and peripherals, including but not limited to, system cables, security cables/locking mechanism, mouse, and keyboard or as directed by department. 4) Boot up system and report any Operating System issues to department. 5) Coordinate and oversee all purchase deliveries to a central department location.
Install & Relocate w/Data Sanitization - WEEKDAY	General County weekday peak hours are 9am to 3:30pm. All service times shall be dictated by ordering department. Tasks to include the following: 1) Deliver device to final destination within one (1) facility, as directed by the ordering department and unpack, removing all packing material. 2) Disconnect and remove existing equipment to a temporary on-site location as directed by department. A) Sanitize drive(s) according to DoD 5220.22-M standard or NIST SP800-88Rev1 standard and provide the department with a certificate certifying completion. i) Details for Certificate of Sanitization to be determined department and may include the following: Dept./County, Asset # of main device, media type, drive mfg., drive model, drive serial #, sanitization type, sanitization method(s), tool(s) used, name of person performing sanitization, position/title of person performing sanitization, date of sanitization, signature of person performing sanitization, verification method of sanitization, name of person performing verification, position/title of person performing verification, date of verification, signature of person performing verification. 3) Install device including connection of CPU and peripherals, including but not limited to, system cables, security cables/locking mechanism, mouse, and keyboard or as directed by department. 4) Boot up system and report any Operating System issues to department. 5) Coordinate and oversee all purchase deliveries to a central department location.
Install & Relocate w/Data Sanitization - WEEKEND	General County weekend peak hours are 9am to 3:30pm. All service times shall be dictated by ordering department. Tasks to include the following: 1) Deliver device to final destination within one (1) facility, as directed by the ordering department and unpack, removing all packing material. 2) Disconnect and remove existing equipment to a temporary on-site location as directed by department. A) Sanitize drive(s) according to DoD 5220.22-M standard or NIST SP800-88Rev1 standard and provide the department with a certificate certifying completion. i) Details for Certificate of Sanitization to be determined department and may include the following: Dept./County, Asset # of main device, media type, drive mfg., drive model, drive serial #, sanitization type, sanitization method(s), tool(s) used, name of person performing sanitization, position/title of person performing sanitization, date of sanitization, signature of person performing sanitization, verification method of sanitization, name of person performing verification, position/title of person performing verification, date of verification, signature of person performing verification. 3) Install device including connection of CPU and peripherals, including but not limited to, system cables, security cables/locking mechanism, mouse, and keyboard or as directed by department. 4) Boot up system and report any Operating System issues to department. 5) Coordinate and oversee all purchase deliveries to a central department location.