Rugged Convertible Laptop

Compact, Purpose-Built for Mission-Critical Environments

The Forest it Rugged Convertible Laptops feature the integration of convertible touch screens, Intel® 10th Generation Core™ i processors, and full-size keyboards. With a built-in smart card/CAC reader as well as optional IR/RGB front cameras for facial recognition, these laptops provide advanced identity verification for secure data access. The optional night vision supports viewing of MIL-STD-3009 class B NVIS mode, offering another layer of security for light-sensitive situations. Rated IP65 and MIL-STD-810G, and supporting a wide temperature range, the Convertible Rugged Laptops provide reliable operation in harsh, mission-critical environments.

Features

- 11.6", 13.3" or 15.6" capacitive screen, 1000 nits and digital pen support
- Convertible screen, transforms from laptop to tablet
- Intel® 10th Generation Core™ i5/i7 processor
- Microsoft® Windows® 10 IoT Enterprise operating system
- Backlit keyboard with multi-touch pad
- Fanless, robust design
- Built-in smart card/CAC reader
- Dual SSD slots, support up to 4TB with RAID 0/RAID 1
- Dual RAM slots, up to 64GB
- Hot-swappable batteries for 24/7 operation
- Modular design to easily replace the SSD and batteries
- Anti-microbial coating
- IP65-rated for water and dust resistance
- MIL-STD-810G/H for shock and vibration protection
- HERO (Hazard of Electromagnetic Radiation to Ordnance) certified

Major Options

- 4K resolution screen (RCL16)
- MIL-STD-3009 class B Night Vision screen
- Front Full-HD camera
- 4G LTE/AWS

Specifications

Model	RCL12	RCL13	RCL16

System

CPU	Intel® Core™ i5-10210U, Quad-Core, 1.6GHz (up to 4.2GHz) Intel® Core™ i7-10710U, 6-Core, 1.1GHz (up to 4.7GHz)		
RAM	8GB to 64GB (dual-slot)	8GB to 64GB (dual-slot)	8GB to 64GB (dual-slot)
Storage	256GB to 4TB SSD (dual-slot, supports quick release and RAID 0/RAID 1)		
Operating System	Microsoft® Windows® 10 IoT Enterprise		
NIST Compliance	NIST compliant BIOS available		
Buttons	1 power button, 2 programmable buttons, 2 brightness control buttons, 1 NVIS/Normal toggle		
Microphone	Built-in microphone	Built-in microphone	Built-in microphone
Speaker	Built-in speakers	Built-in speakers	Built-in speakers

Display

Screen Size	11.6" screen with capacitive touch, 16.7M colors	13.3" screen with capacitive touch, 16.7M colors	15.6" screen with capacitive touch, 16.7M colors
Resolution	1920 x 1080	1920 x 1080	1920 x 1080, or 3840 x 2160 (optional)
Luminance	Standard sunlight readable screen: 1000 nits Optional night vision screen – daylight mode: 800 nits; NVIS mode: 0 to 20 nits. MIL-STD-3009 Class B compliant, providing clear readability of the display with naked eyes in dark environments and does not interfere with NVGs. Optional night vision screen – daylight mode: 800 nits; NVIS mode: 0 to 0.7 nits. MIL-STD-3009 Class B compliant, providing clear readability of the display with NVGs in dark environments.		
Contrast Ratio	800 (typical)	800 (typical)	800 (typical)
Optical Response Time	25 msec (typical)	25 msec (typical)	25 msec (typical)

Keyboard

Keys	QWERTY, full row of F1 to F12 function keys Keys for Windows shortcuts, media controls, screen brightness		
Backlight	Yes	Yes	Yes
Touch Pad	Multi-touch	Multi-touch	Multi-touch

Wireless Network Interface

WLAN	Wi-Fi 802.11ax, 2.4GHz/ 5GHz dual band	Wi-Fi 802.11ax, 2.4GHz/ 5GHz dual band	Wi-Fi 802.11ax, 2.4GHz/ 5GHz dual band
Bluetooth	Bluetooth 5.1	Bluetooth 5.1	Bluetooth 5.1

I/O Ports

USB Port	USB 3.0 x 2, USB Type-C x 1 (for data transmitting, video-out, and charging)	USB 3.0 x 2, USB Type-C x 1 (for data transmitting, video-out, and charging)	USB 3.0 x 2, USB Type-C x 1 (for data transmitting, video-out, and charging)
Ethernet	Ethernet 10/ 100/ 1000MB Base-T LAN	Ethernet 10/ 100/ 1000MB Base-T LAN	Ethernet 10/ 100/ 1000MB Base-T LAN
COM Port	N/A	1	1
HDMI-out	1	1	1
Audio Jack	1 (3.5mm)	1 (3.5mm)	1 (3.5mm)
DC-in	1	1	1
SD Card Reader	N/A	N/A	1
Smart Card/CAC Reader	Full-slot, reads ISO 7816 T=0, T=1; 1.8/3/5V smart card		
Kensington Lock	1		1

Mechanical and Environmental

AC/DC Adapter	Input: 100-240V AC; Output: 19V DC, 3.42A		
Battery Pack	Hot swappable battery, 11.4V,5400mAh x 1 Hot swappable battery, 11.4V,8000mAh (optional) x 1	Hot swappable battery, 11.4V,5400mAh x 2 Hot swappable battery, 11.4V,8000mAh (optional) x 2	
Enclosure	ABS + PC plastics and magnesium-aluminum alloy with anti-microbial coating		
Dimensions (H x W x D)	1.7 x 12.8 x 10.6 in / 43 x 326 x 268 mm	1.7 x 13.8 x 11 in / 43 x 351 x 280 mm	1.9 x 15.2 x 11.7 in / 48 x 385 x 297 mm
Weight	6.3 lbs/ 2.86 kg	7.5 lbs/ 3.4 kg	8.95 lbs/ 4.06kg
Durability	IP65 and MIL-STD-810G certified		
Hazard of Electromagnetic Radiation to Ordnance (HERO) Testing	Yes	Yes	Yes
Regulatory	FCC Class B, CE, RoHS compliant		
Temperature	Operation: -10°C to 60°C (14°F to 140°F), optional -30°C to 60°C (-22°F to 140°F) Storage: -55°C to 70°C (-67°F to 158°F)		
Humidity	0% – 95% non-condensing		

Major Options

Camera	Front Full-HD camera with auto white balance and gain/exposure control		
Mobile Broadband	4G LTE/AWS	4G LTE/AWS	4G LTE/AWS