



Rugged Convertible Laptop

Compact, Purpose-Built for Mission-Critical Environments

The DT Research 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 panel supports viewing of MIL-STD-3009 class B NVIS mode, offering another layer of security for light-sensitive situations. Rated IP65, MIL-STD-810G/H, MIL-STD-461F, 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
- 88 standard, full-size 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, support up to 64GB
- Hot-swappable batteries for 24/7 operation
- Modular design to easily replace the SSD and batteries
- MIL-STD-810G/H for shock and vibration protection
- MIL-STD-461F for EMI and EMC tolerance
- HERO (Hazard of Electromagnetic Radiation to Ordnance) certified



Major Options

- MIL-STD-3009 class B Night Vision screen
- Front Full-HD web camera
- U-blox M8 GNSS module
- 4G LTE/AWS

Specifications



Model	LT320	LT330	LT350
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		
Speaker	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
Luminance	Standard sunlight readable screen: 1000 nits	Standard sunlight readable screen: 1000 nits	Standard sunlight readable screen: 1000 nits
	Optional night vision screen: 800 nits; NVIS mode: 0 to 20 nits. MIL-STD-3009 Class B Compliant. Chromaticity, CIE 1976: u'=0.190, v'=0.490, r<0.04; radiance: 2.2E-9 @ 0.5 fL (NRb)		
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		
Touch Pad	Supports multi-touch	Supports multi-touch	Supports multi-touch

Wireless Network Interface

WLAN	Wi-Fi 802.11ac, 2.4GHz/ 5GHz dual band	Wi-Fi 802.11ac, 2.4GHz/ 5GHz dual band	Wi-Fi 802.11ac, 2.4GHz/ 5GHz dual band
Bluetooth	Bluetooth 4.2 LE	Bluetooth 4.2 LE	Bluetooth 4.2 LE

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
Smart Card/CAC Reader	Full-slot, reads ISO 7816 T=0, T=1; 1.8/3/5V smart card		

Mechanical and Environmental

AC/DC Adapter	Input: 100-240V AC; Output: 20V DC, 3.25A		
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		
Dimensions (H x W x D)	9.3 x 1.6 x 1.5 in/ 235 x 320 x 39.2 mm	9.7 x 13.6 x 1.5 in/ 247 x 345 x 39.2 mm	10.5 x 14.8 x 1.5 in/ 265.5 x 376 x 39.2 mm
Weight			
Durability	IP65, MIL-STD-810G/H and MIL-STD-461F 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) with heating pad Storage: -55°C to 70°C (-67°F to 158°F)		
Humidity	0% – 90% non-condensing		

Major Options

Camera	Front Full-HD camera with auto white balance and gain/exposure control		
GNSS Module	U-blox M8 GNSS module with concurrent reception of GPS and GLONASS, industry leading -167dBm navigation sensitivity		
Mobile Broadband	4G LTE/AWS	4G LTE/AWS	4G LTE/AWS

* Specifications subject to change without notice.

Product Configurator

