



LT320 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 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" 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 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
- 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 camera
- U-blox M8N GNSS module
- 4G LTE/AWS



Specifications



LT320

Model	LT320
System	
CP	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)
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
Resolution	1920 x 1080
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)
Optical Response Time	25 msec (typical)
Keyboard	
Key	QWERTY, full row of F1 to F12 function keys Keys for Windows shortcuts, media controls, screen brightness
Backlight	Yes
Touch Pad	Multi-touch
Wireless Network Interface	
WLAN	Wi-Fi 802.11ac, 2.4GHz/ 5GHz dual band
Bluetooth	Bluetooth 4.2 LE
I/O Ports	
USB	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
COM Port	N/A
HDMI-out	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
Enclosure	ABS + PC plastics and magnesium-aluminum alloy
Dimensions (H x W x D)	1.5 x 12.5 x 9.3 in / 39.2 x 320 x 235 mm
Weight	6.3 lbs/ 2.86 kg
Durability	IP65, MIL-STD-810G/H and MIL-STD-461F certified
Hazard of Electromagnetic Radiation to Ordnance (HERO) Testing	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% – 90% non-condensing
Major Options	
Camera	Front Full-HD camera with auto white balance and gain/exposure control
GNSS Module	U-blox M8N
Mobile Broadband	4G LTE/AWS

* Specifications subject to change without notice.

Product Configurator

