Rugged Convertible Laptop

Compact, Purpose-Built for Mission-Critical Environments

The DT Research Rugged Convertible Laptops feature the integration of convertible touch screens, Intel® 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-810H/461G 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" high-brightness touchscreen; digital pen supported
- Convertible screen to transform from laptop to tablet
- Intel® Core™ i5/i7 processor
- Microsoft® Windows® 11 IoT Enterprise operating system
- Backlit keyboard with multi-touch pad
- Fanless, robust design with antimicrobial coating
- 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
- IP65-rated for water and dust resistance
- MIL-STD-810H for shock and vibration protection
- MIL-STD-461G for EMI and EMC tolerance
- HERO (Hazard of Electromagnetic Radiation to Ordnance) certified

Major Options

- 4K resolution screen (LT350)
- MIL-STD-3009 class B Night Vision screen
- Front Full-HD camera
- 4G LTE/AWS
- Embedded NVIDIA RTX™ A1000 or A2000 MXM graphics card(LT355)

Specifications

Model	LT320	LT330	LT350	LT355

System

	LT320	LT330	LT350	LT355
CPU	Intel® Core™ i5-10210U, 4-Core, 1.6 GHz (up to 4.2 GHz) Intel® Core™ i7-10710U, 6-Core, 1.1 GHz (up to 4.7 GHz)	Intel® Core™ i5-1240P, 12-Core, up to 4.4 GHz Intel® Core™ i7-1260P, 12-Core, up to 4.7 GHz		Intel® Core™ i5-1340P, 12-Core, up to 4.6 GHz Intel® Core™ i7-1370P, 14-Core, up to 5.2 GHz
RAM	8GB to 64GB (dual-slot)	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)			64GB to 2TB SSD (Supports Removable SSD and RAID)
Operating System	Microsoft® Windows® 11 IoT Enterprise			
NIST Compliance	NIST Compliant BIOS Available			
Buttons	1 x Power Button, 2 x Programmable Buttons, 2 x Brightness Control Buttons, 1 x NVIS/Normal Toggle			1 x Power Button, 4 x Programmable Touch Buttons
Microphone	Built-In Microphone	Built-In Microphone	Built-In Microphone	Built-In Microphone
Speaker	Built-In Speaker	Built-In Speaker	Built-In Speaker	Built-In Speaker

Display

	LT320	LT330	LT350	LT355
Screen Size	11.6" Touchscreen; 16.7M Colors	13.3" Touchscreen; 16.7M Colors	15.6" Touchscreen; 16.7M Colors	15.6" High-Brightness (1200 nits) Touchscreen
Resolution	1920 x 1080	1920 x 1080	1920 x 1080, or 3840 x 2160 (optional)	1920 x 1080
Luminance	Standard High-Brightness (1000 nits)	Standard High-Brightness (1000 nits)	Standard High-Brightness (1000 nits)	Standard High-Brightness (1200 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.			
Optical Response Time	25 msec (Typical)	25 msec (Typical)	25 msec (Typical)	25 msec (Typical)

Keyboard

	LT320	LT330	LT350	LT355
Keys	QWERTY, full row of F1 to F12 function keys. Keys for Windows shortcuts, media controls, screen brightness			
Backlight	Yes	Yes	Yes	Yes
Touch Pad	Multi-Touch	Multi-Touch	Multi-Touch	Multi-Touch

Wireless Network Interface

	LT320	LT330	LT350	LT355
WLAN	Wi-Fi 802.11ax, 2.4/5 GHz Dual Band	Wi-Fi 802.11ax, 2.4/5 GHz Dual Band	Wi-Fi 802.11ax, 2.4/5 GHz Dual Band	Wi-Fi 802.11ax 2.4/5/6 Ghz three band
BT	Yes	Yes	Yes	Yes

I/O Ports

	LT320	LT330	LT350	LT355
USB Port	USB 3.0 x 2, USB Type-C x 1 (for data transmitting, video-out, and charging)			3 x USB-A
Ethernet	Ethernet 10/100/1000 MB Base-T LAN	Ethernet 10/100/1000 MB Base-T LAN	Ethernet 10/100/1000 MB Base-T LAN	Ethernet 10/100/1000 MB Base-T LAN
COM Port	N/A	1	1	1
HDMI-out	1	1	1	1
Audio Jack	1 (3.5 mm)	1 (3.5 mm)	1 (3.5 mm)	1 (3.5 mm)
DC-In	1	1	1	1
SD Card Reader	N/A	N/A	1	1
Smart Card/CAC Reader	Full-slot, reads ISO 7816 T=0, T=1; 1.8/3/5V smart card			
Kensington Lock	1	1	1	1

Mechanical and Environmental

	LT320	LT330	LT350	LT355
AC/DC Adapter	Input: 100-240V AC; Output: 19V DC, 3.42A			Input: 100-240V AC; Output: 19V, 230W Adapter
Battery Pack	1 x Hot-Swappable Battery (11.4V, 5400mAh) 1 x Hot-Swappable battery (11.4V, 8000mAh) (Optional)	2 x Hot-Swappable Battery (11.4V, 5400mAh) 2 x Hot-Swappable Battery (11.4V, 8000mAh) (Optional)		
Enclosure	ABS + PC Plastic & Magnesium-Aluminum Alloy with Antimicrobial 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	2.1 x 15.2 x 11.7 in/54.4 x 385 x 297 mm
Weight	6.3 lbs/2.86 kg	7.5 lbs/3.4 kg	8.95 lbs/4.06 kg	9.70 lbs/4.4 kg
Durability	IP65, MIL-STD-810H and MIL-STD-461G Certified			
Hazard of Electromagnetic Radiation to Ordnance (HERO) Testing	Yes	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% to 90% Non-Condensing			

Major Options

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Camera	Front Full-HD Camera with Auto White Balance & Gain/Exposure Control			N/A
Mobile Broadband	4G LTE/AWS	4G LTE/AWS	4G LTE/AWS	4G LTE/AWS
Graphics Card	N/A	N/A	N/A	Embedded MXM GPU Module with Embedded NVIDIA RTX™ A1000 or A2000 MXM

* Specifications subject to change without notice.