



State of Michigan Rugged Comparison Guide

As of 04/09/2021

For the purpose of this document, we define a **rugged** device as a device that has passed portions of or all of the MIL-STD-810G testing, defining it as rugged. This document provides guidance on the system units in the rugged laptop category in Sigma. Included: the Dell 5420 14" Rugged Laptop and the Dell Latitude 7220 Rugged Tablet w/Kickstand.

We define **rugged-extreme** as a device that is fully adapted for use within harsh environments where there may be freezing temperatures or temperatures up to 120 degrees Fahrenheit. These devices are weatherproofed and sealed to prevent salt, sand, moisture, or other environmental hazards from affecting the device. **Rugged** is not protected to the same degree as the rugged extreme devices. They can withstand high temperatures and low temperatures but can suffer from a decrease in performance in these environments. They are good for travel and outdoor use, but they are not sealed against environmental hazards.

NOTE: Numbers listed in this document (TXX and LXX) are SIGMA numbers.

[Details of each model on the following pages](#)

Dell 5420 Rugged (L165) – \$2085.00

14" laptop made with shock-absorbent materials and meets rigorous military-standard requirements. Compression-sealed from sand, dust, and liquids.

This laptop comes with a 4-year warranty that is next business day and on-site.

Operating System

- Windows 10 Pro

Technical Specifications

- Intel® Core™ i5-8350U
- 16GB DDR4
- 512GB Solid State Drive
- 14.0" HD (1366x768) Direct-View outdoor-readable display with resistive touchscreen
- DVD/RW
- Intel Dual Band Wireless-AC 8265 plus Bluetooth
- Backlit keyboard
- 2x USB 3.0 Type A
- 1x USB 3.0 Type C
- 1x RJ-45 gigabit Ethernet network connector
- 1x VGA Port
- 1x HDMI
- Dimensions: 1.29 x 13.66" x 9.63"
- Weight 4.5lbs.
- 4-year warranty



*****Dell 5420 Rugged laptop – same configuration as above with 32GB of RAM, no Mobile Broadband Card, and a 3-year warranty (L178). \$2059.00**



Ports & Slots

1. Removable Primary SATA storage Bay | 2. SD Card Slot | 3. SIM Card Slot | 4. USB 3.0 Type A | 5. Stylus (Optional) | 6. RJ-45 gigabit Ethernet network connector (Optional) | 7. 2nd serial, VGA, Display Port or Fischer USB | 8. Native Serial | 9. RJ-45 gigabit Ethernet network connector | 10. HDMI | 11. Lock slot | 12. Power In | 13. USB 3.0 Type C™ | 14. USB 3.0 Type A | 15. USB 3.0 Type A | 16. Universal Audio Jack

Dell Latitude 7220 Rugged Tablet w/Kickstand (T96) – \$1904.00

11.6" 1920x1080, outdoor readable lightweight powerful fully rugged touchscreen tablet.

This laptop comes with a 4-year warranty that is next business day and on-site.

Operating System

- Windows 10 Pro

Technical Specifications

- Intel® Core™ i7-8665U Processor
- 16GB DDR4
- 5256G Solid State Drive
- 11.6" touchscreen
- Intel Dual Band Wireless-AC 9560
- U-blox NEO-MB-GPS card
- HD IR webcam/ 8 MP rear camera with Flash and Dual Microphone
- 1x Mini Serial RS-232 port
- 1x USB 3.0 Type C port with DisplayPort Alt Mode/PowerShare
- 1x USB 3.1 Type-A with Power Delivery
- 1x Micro SD card slot
- 1x Combo mic/headphone jack
- 1x Kensington lock slot
- Dimensions: 0.96 x 12.29" x 7.99"
- Weight 2.93lbs.
- 4-year warranty
- Keep your hard drive



Ports & Slots

1. DC-in | 2. Mini Serial RS-232 port | 3. USB 3.0 Type-C™ port with DisplayPort Alt Mode/PowerShare | 4. USB 3.1 Type-A with Power Delivery | 5. Micro SD-card slot | 6. Combo mic/headphone Jack | 7. Fan exhaust | 8. Kensington lock slot

Comparison-

Laptops and Tablets

	<u>Dell 5420 Rugged Laptop</u>	<u>Dell Latitude 7220 Rugged Tablet</u>
	L165	T96
Processor	i5	i5
Wireless	Yes	Yes
Storage	512 GB SSD	256 GB SSD
Keyboard	Backlit (RGB)	No
Camera	Yes	Yes
Memory	16 GB DDR4	16 GB
Dock	No	No
Warranty	4-year, On-site	4-year, On-site
Screen	14" Touchscreen	11.6" Touchscreen
USB Ports	2x USB 3.0 Type A, 1x USB 3.0 Type C	1x USB3.0 Type C 1x USB 3.1 Type A
Display Ports	2 (1xHDMI, 1xVGA)	1