

L140AD-4

14-inch Ultra Rugged Laptop with Intel® Core™ i5-1235U



KEY FEATURES

- 12th Gen. Intel® Processor Family – Alder Lake Processor
- 14" 1920 x 1080 FHD LED panel with direct optical bonding
- Antiglare technology for sunlight readability
- Dual battery with hotswappable design for wholeday work
- Flip design for quick switching between rugged laptop and rugged tablet modes
- Magnesium alloy enclosure with double injection for drop protection
- Integrated smart card reader or 2nd GigaLAN port



OVERVIEW



Durability for Harsh Environment

Tough Exterior: Winmate laptop has passed the drop test from a meter high and impact resistance with performance assurance according to the US Defence Standard MIL-STD-810H and certified by IP65 ingress protection to ensure no environment is too hazardous for this rugged laptop.

Outdoor-compatible: The L140AD-4 is tough enough to withstand repeated drops, extreme temperatures, altitudes, humidity, and water and dust exposure, allowing the rugged laptop to be used in harsh environments for industrial and defence use.



Tailored Gear Solutions

Seamless Collaboration: Limit downtime with WLAN, BT support, GPS / GLONASS, and 4G LTE(optional) connectivity options for faster data transmission rates, lower latency, and increased capacity even in remote environments.



Responsive Screen with Outdoor Visibility

Sunlight Readable: Thrive beneath daylight conditions with optical bonding and anti-glare technologies for an outdoor viewable LED display.

Touch or Take Notes: The L140AD-4 durable laptop supports rain mode, glove touch, and a passive pen to capture information in any setting.



Performance Perfected

Flexible Storage: Store critical data with up to 2 M.2 NVME solid-state drives (SSD) for up to 4 TB of total storage.

Support 24x7 Operations: Dual hot-swappable batteries provide continuous power, so you are always ready for the day, night, and everything in between.

Ultimate Responsive Screen: Supports rain mode, stylus, gloved-touch capability, anti-glare technology, and optical bonding for direct-sunlight viewability.



Optimal Personalization

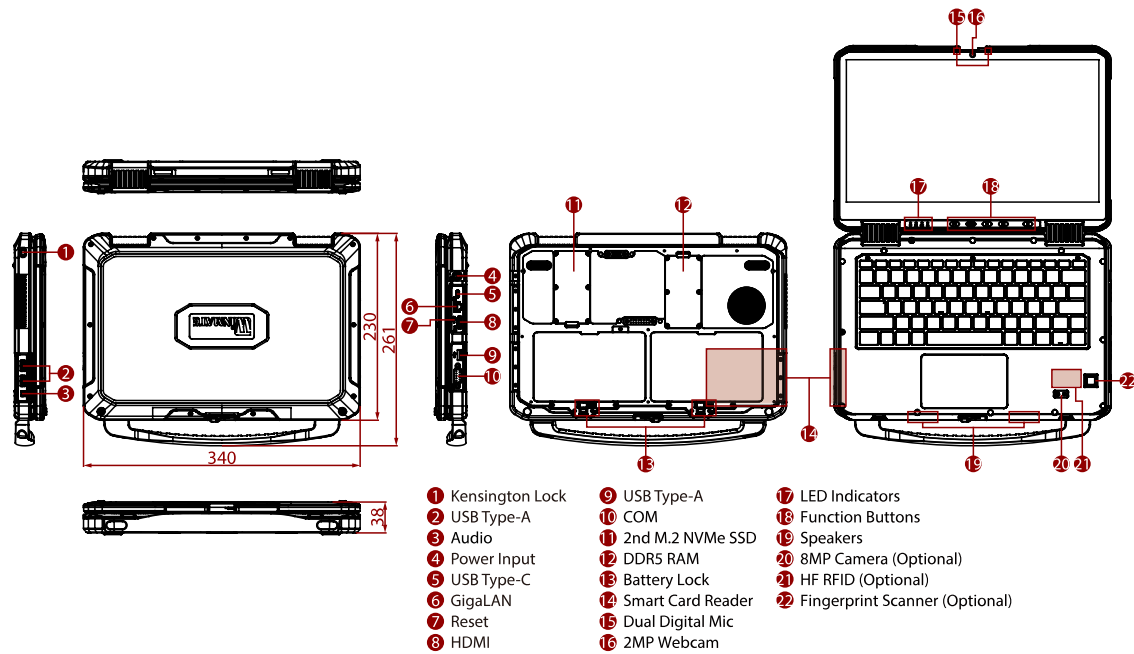
Flexible Dual Hinges: Seamlessly switch between a rugged laptop and a tablet. They are stiff enough to prevent the screen from wobbling when you tap on the screen, yet flipping the panel around to transition into tent or tablet mode does not require much force.

SPECIFICATIONS

Display			
Bonding	Optical Bonding for Sunlight Viewability	Resolution	1920x1080
Size	14.0 inches	Contrast Ratio	800:1

Panel Brightness	700.0 nits	View Angles	85,85,85,85
Type	Projected Capacitive Multi Touch		
System Specification			
Processor	Intel Core i5-1235U (up to 4.4GHz)	Memory	8GB DDR5 SDRAM 16GB DDR5 SDRAM (Optional) 32GB DDR5 SDRAM (Optional)
Storage	256GB M.2 NVMe SSD 512GB M.2 NVMe SSD (Optional) 1TB M.2 NVMe SSD (Optional) 2TB M.2 NVMe SSD (Optional) 2nd storage available with up to 2TB M.2 NVMe SSD (Optional)	Security	Trusted Platform Module (TPM) 2.0 Kensington Lock
Operating System	Windows 11 IoT Enterprise LTSC (64 bit) Windows 10 IoT Enterprise LTSC (64 bit) (Optional)	WLAN	Support
BT	Support	WWAN	4G LTE (Optional) 5G (Optional)
GNSS	GPS, GLONASS	RFID	HF RFID reader 13.56 MHz (Optional)
Smart Card Reader	Smart Card Reader (Mutually exclusive with 2nd LAN)	Fingerprint Scanner	Fingerprint scanner (Optional)
Camera			
Front Camera	2MP front camera	Rear Camera	8MP rear camera with autofocus and LED light (Optional)
Mechanical			
Dimension	340 x 230 x 38 mm	Weight	2.65 kg
Cooling System	Fan Design		
IO Ports			
USB Port	1 x USB 3.0 (Type C) 3 x USB 3.0 (Type A) (One USB-A is mutually exclusive with 2nd LAN)	Serial Port	1 x DB9 (RS232 / RS422 / RS485, software switchable)
SD Card Slot	1 x Micro SDXC Slot	SIM Card Slot	1 x Nano SIM card slot
Video	1 x HDMI 4K Output	Audio	1 x Audio combo 3.5mm audio combo jack Dual Digital Mic With Noise Cancellation Dual Speaker
LAN	1 x RJ45-10/100/1000 GigaLAN port Optional 2nd LAN (Mutually exclusive with one USB-A & Smart Card Reader)	Indicator	4x LED Indicator for Power, Battery, HDD, RF status
Environment			
Operating Humidity	10% to 90% RH, non-condensing	Operating Temperature	-20°C to 60°C
Storage Temperature	-30°C to 70°C	Shock	MIL-STD-810H Method 516.8 Procedure I
Vibration	MIL-STD-810H Method 514.8 Procedure I	IP rating	IP65
Drop	MIL-STD-810H Method 516.8, 4 ft	EMC	MIL-STD-461G CE101, CE102, RE101, RE102, CS118 (Default) MIL-STD-461G CS101, CS114, CS115, CS116, RS101, RS103 MIL-STD-461G RE102 Ground Army Grade (Optional)
Certification			
Certification	CE, FCC		
Security Function			
SOTI MobiControl	SOTI MobiControl Compliance	Kensington Lock	Kensington Lock Support
Control			
Button	1 x Power, 2 x volume key, 2 x Programmable Function Keys QWERTY keyboard with RGB backlight		
Power			
Battery	Hot-swappable 2 x 11.55V, typ. 3220 mAh Li-Ion Battery (3S1P)	Battery Operating Time	Standard Battery: 11 hours
Power Rating	19V DC	Adapter	100-240V, 50-60Hz / 19V DC
Accessory			
Accessory	Adapter and Power Cord Standard Battery	Optional Accessory	Spare Battery (Optional) Battery Charger (Optional) Vehicle Charger (Optional) Carry Bag (Optional)

DIMENSIONS UNIT:MM



NOTE

/ Disclaimer /

- Accessories and Integrated Options may vary depending on your configuration.
- Total usable memory and storage will be less dependent upon actual system configuration.
- The actual transfer speed will vary depending on many factors including the processing speed of the host device, file attributes, and other factors related to the system configuration and your operating environment.
- The USB Type-C connector follows USB 3.0 standard, which does not support Alternate Mode (ALT) or USB Power Delivery (USB-PD).
- The battery life is measured at dimming LCD brightness. Varies depending on the usage conditions, or when an external device is attached.
- The 2D drawing is simplified drawing and some components are not marked in detail.
- Length measurements do not include protrusions. Weight varies with options.
- TPM 2.0 available upon request.
- SOTI is available upon request.
- The product shown in this datasheet is a standard model. For diagrams that contain customized or optional I/O, please contact the Winmate Sales Team for more information.