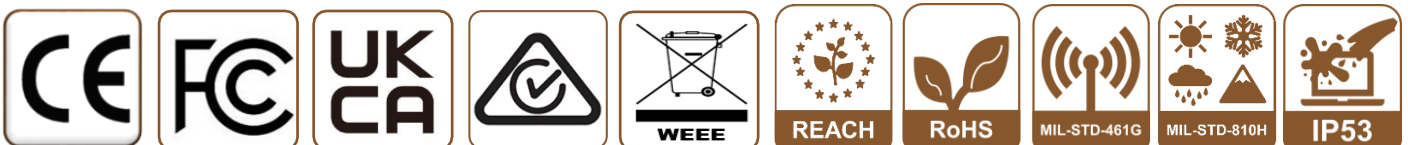


LITE-RUGGED LAPTOP

ML15



- Powered by the Intel® Core™ i5-11500H processor, offering for seamless multitasking and enhanced productivity.
- Expandable performance through discrete GPUs, delivering advanced processing power ideal for peak-performance computing tasks.
- Features a 15.6" FHD display with a high brightness of 1000 nits, ensuring perfect readability even in outdoor environments.
- Provides upgradeable memory and storage expansion options for effortless system enhancements.
- Compliant with MIL-STD-810H, yet equipped with a lightweight chassis for portability and reliable operation under harsh conditions.
- Configurable with flexible connectivity options and a user-removable Flex Bay, boosting versatility and functionality.
- Upgradable with an optional MIL-STD-461G (Ground Navy) EMC solution for advanced reliability.



LITE-RUGGED LAPTOP

ML15



Items	Descriptions
Platform	– Intel® Tigerlake-H Platform
Operation System	– Windows 11 IoT
Processor	– Intel® Core™ i5-11500H Processor – 6 Cores, 12MB Cache, up to 4.6GHz – Support vPro®
Graphic	– Intel® UHD Graphics Optional: – MXM Discrete Graphic Card NVIDIA® RTX A1000 ¹
Display	– 15.6" (1920 x 1080) LCD – Optical Bonding – Brightness: 1000 nits ² Optional: – Capacitive Multi-Touch Screen
Memory ^{3,4}	– 1 st : 8GB DDR4-3200 x 1 Optional: – 1 st : 16GB/32GB DDR4-3200 x 1 – 2 nd : 8GB/16GB/32GB DDR4-3200 x 1
Storage ³	– 1 st : 256GB M.2 2280 PCIe 3.0 SSD (Kit) Optional: – 1 st : 512GB/1TB M.2 2280 PCIe 3.0 SSD (Kit) – 2 nd : 256GB/512GB/1TB M.2 2242 PCIe 4.0 SSD – 3 rd : 256GB/512GB/1TB 2.5" SATAIII SSD (Flex Bay)
Audio	– HD Audio and Stereo Speakers – Embedded Digital Mic
Camera	– 5MP Webcam, with Camera Cover and Indicator
Sensor	– Ambient Light Sensor
Keyboard	– 86-key with Backlight
Touchpad	– Capacitive Touchpad with Left/Right Clicks
Button	– Power Button
LED Indicator	– Power: System ON/ S3 (Green/ Breathing Green) – SSD in Use (Flashing Green) – Battery: Charging/ Low (Orange/ Flashing Orange)
Security	– TPM 2.0
Case	– Engineering Plastic/ Aluminum Alloy
Color	– Black
Environmental Specifications	– Operating Temperature: -10°C ⁵ ~ +60°C ⁶ – Storage Temperature: -40°C ~ +70°C
Dimensions ⁷	– 392 x 282 x 43mm (with bumpers)
Weight ⁷	– Approximately 3.3 kg

Power	
Primary Battery ^{3,11}	– Standard Battery Pack BMLF3A: Li-Ion 10.905V/6000mAh
Input Power	– Fast Charging via Type-C – 60W~100W – DC-in – 19V

Wireless & Communications	
LAN	– 2.5G base-T Ethernet
WLAN/ Bluetooth ⁸	– Intel® Wi-Fi 6E AX210 (802.11ax) – Bluetooth® 5.3
GNSS	Optional: – GPS/GLONASS/Galileo/Beidou

I/O Interfaces	
Left	– Audio In/Out Combo x 1 – Thunderbolt™ Type-C x 1 (Full function) – USB 3.2 Gen.2 Type-A x 2 – 1 st LAN RJ45 x 1 – SD Card Reader x 1 – SIM Card Slot ¹¹ x 1 – Primary Battery Slot x 1
Right	– DC-in x 1 Optional: – 2 nd Battery Slot x 1 – Flex Bay Slot – User-removable Type – Express Card 34/54 – SATA ODD – 3 rd Storage 2.5" SATAIII SSD – Non-user-removable Type – MXM Discrete Graphic Card NVIDIA® RTX A1000 ¹
Front	Optional: – Smart Card Reader
Rear	– Dual-Mode Display Port x 1 – HDMI® Connector ⁸ x 1 Optional: – Flexible I/O Kit Set ⁹ – A: USB 2.0 Type-A x 1 + 2 nd LAN RJ45 x 1 – B: COM Port DB9 up to 2 – C: VGA x 1 – Fischer I/O Kit Set ⁹ – A: USB 2.0 x 1 + 2 nd LAN x 1 – B: COM Port up to 2 – C: VGA x 1
Bottom ³	– 1 st Storage: M.2 2280 PCIe 3.0 SSD x 1 – 1 st DDR4-3200 SO-DIMM x 1 Optional: – 2 nd DDR4-3200 SO-DIMM x 1 – GNSS and Smart Card Reader Module Slot – 2 nd Storage M.2 2242 PCIe 4.0 SSD Module Slot

Accessories	
2nd Battery Pack ¹⁰	– Standard Battery Pack BMLF3A Li-Ion 10.905V/6000mAh
AC Adapter	– DC-in Jack – 160W 100-240VAC, 50/60Hz
Battery Charger	– Multi Battery Charger MCRW

Certifications	
Certifications	– CE/FCC/UKCA/RCM – WEEE – REACH – POPs – RoHS – IP53 – MIL-STD-810H (0.9m drop and vibration) – MIL-STD-461G (Ground Navy) ¹¹

¹NVIDIA® RTX A1000 must be pre-configured.

²Varies from display configurations.

³User-removable

⁴System Memory up to 64GB

⁵Instant Cold Boot via AC Mode.

⁶via AC Mode

⁷Varies from configurations and optional accessories.

⁸Support 4K@50Hz/60Hz as specified in HDMI2.0b.

⁹Choose up to 3 combinations from Flexible and Fischer I/O Kit, non-repeatable for each interface.

¹⁰Hot-swappable with dual battery design.

¹¹Contact your sales representative for more details.