



2026 Windows Rugged Laptop Product Roadmap



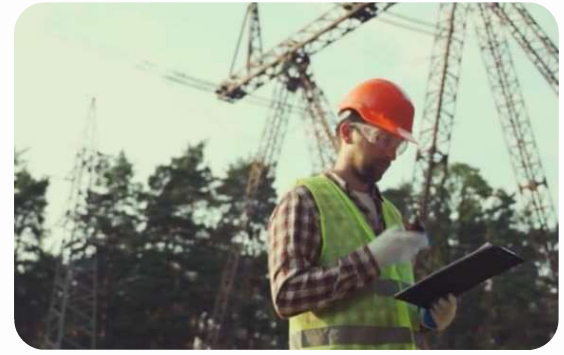
Target Market



Law Enforcement



Public Safety



Field Service



Military & Defense



Automotive



Oil & Gas

2026 Rugged Laptop Product Portfolio

15.6"

L156AD

FHD Panel Resolution
Intel Core i5-1235U

L156AD-M1/M2/M3

FHD Panel Resolution
Intel Core i7-12700H
Discrete GPU

Discrete
GPU

L156MT

2026 Q3

FHD Panel Resolution
Intel Core Ultra 5 225U

L156AD-4KM1/M2/M3

4K Panel Resolution
Intel Core i7-12700H
Discrete GPU

4K

Discrete
GPU

L156MT-M1/M2/M3

2026 Q3

FHD Panel Resolution
Intel Core Ultra 7 255H
Discrete GPU

Discrete
GPU

L156MT-4KM1/M2/M3

2026 Q3

4K Panel Resolution
Intel Core Ultra 7 255H
Discrete GPU

4K

Discrete
GPU



14"

L140AD-4

FHD Panel Resolution
Intel Core i5-1235U

L140AD-4L

FHD Panel Resolution
Intel Core i5-1235U

L140AD-4K

4K Panel Resolution
Intel Core i5-1235U

4K

L140MT-4

2026 Q3

FHD Panel Resolution
Intel Core Ultra 5 125U

L140MT-4L

2026 Q3

FHD Panel Resolution
Intel Core Ultra 5 125U

L140MT-4K

2026 Q3

4K Panel Resolution
Intel Core Ultra 5 125U

4K

LM140

2026 Q4

FHD Panel Resolution
Intel Core Ultra 5 125U

LM140S

2026 Q3

FHD Panel Resolution
Intel Nova Lake processor

LM140-M1/M2/M3

2026 Q4

FHD Panel Resolution
Intel Core Ultra 7 155H
Discrete GPU

Discrete
GPU



13.3"

L140AD-3

FHD Panel Resolution
Intel Core i5-1235U

L140MT-3

2026 Q3

FHD Panel Resolution
Intel Core Ultra 5 125U



Developing

MP

L156 Series

Key Features



- 12th / 13th / 15th generation Intel Processor Family – Alder Lake / Raptor Lake / Arrow Lake Processor
- **Optional discrete NVIDIA Graphic card**
- **15.6" FHD and 4K Panel resolution options to fulfill diverse applications**
- Anti-glare technology for sunlight readability
- Projective Capacitive Touch supporting switchable Rain/Glove modes
- Magnesium alloy enclosure with double injection for drop protection
- IP65 waterproof and dustproof
- WiFi-6E & optional WWAN 5G support
- Dual battery with hot-swappable design for whole-day-work

L156 Series Form Factor



L156 Series Upgrade Plan

15.6"



L156AD

FHD Panel Resolution
Intel Core i5-1235U

L156AD-M1/M2/M3

FHD Panel Resolution
Intel Core i7-12700H
Discrete GPU

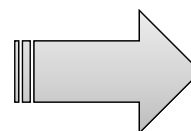
Discrete
GPU

L156AD-4KM1/M2/M3

4K Panel Resolution
Intel Core i7-12700H
Discrete GPU

4K

Discrete
GPU



**Upgrade to
New Generation**

L156MT

2026 Q3

FHD Panel Resolution
Intel Core Ultra 5 225U

L156MT-M1/M2/M3

2026 Q3

FHD Panel Resolution
Intel Core Ultra 7 255H
Discrete GPU

Discrete
GPU

L156MT-4KM1/M2/M3

2026 Q3

4K Panel Resolution
Intel Core Ultra 7 255H
Discrete GPU

4K

Discrete
GPU

Developing

MP

1. Core Ultra processor support - Arrow Lake
2. Enhanced System Performance & Power Efficiency
 - Intel® AI Boost with integrated NPU
3. High-capacity battery pack to extend the battery life
4. New discrete GPU options support
 - Supporting MXM Type-B module A4500
5. Docking station supported

L156 Series

Key Features

01

Hot-swappable battery design for uninterrupted operation in field.

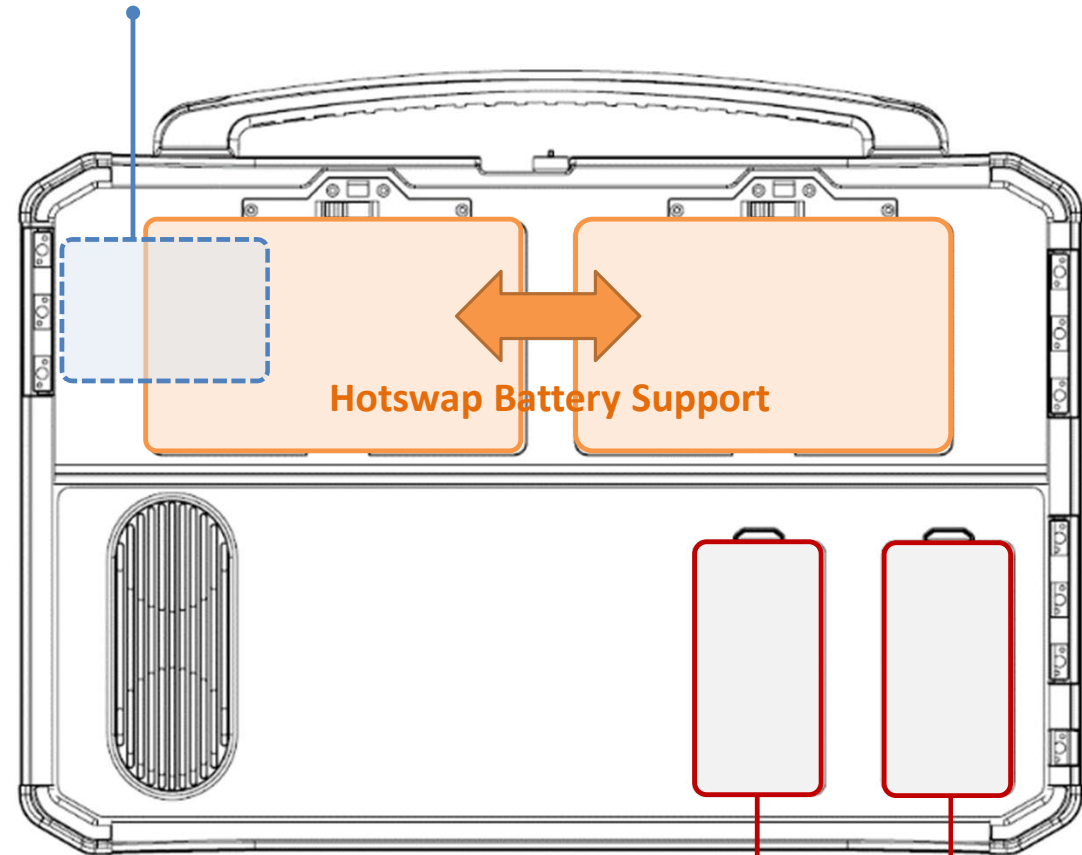
02

Service windows for Main RAM & 2nd SSD replacement.

03

Integrated smart card reader for security applications (fully inserted and sealed).

Integrated Smart Card Reader
(Fully Inserted and sealed)



DDR RAM
(Main)

2nd M.2 NVMe SSD:
• Storage up to 2TB
• RAID support

L156 Series Embedded Hybrid GPU design



Embedded
Intel GPU

Normal Use

Performance

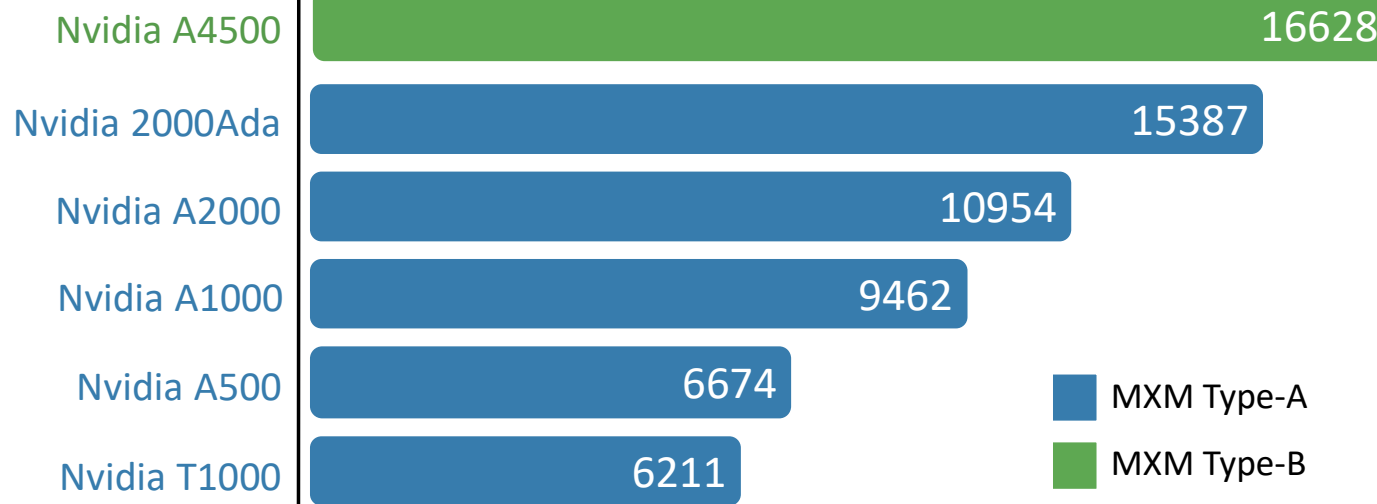
Discrete GPU



Hybrid Design: Balance performance and power saving



Embedded PCI Express
Nvidia Graphic Card



PassMark G3D Mark

*Score only for reference , depends on different test unit

MXM Module Option List

NVIDIA					
Support Model	L156AD LM140	L156AD LM140	L156AD	L156AD LM140	L156AD
GPU module	A500	A1000	A2000	2000Ada	A4500
Architecture	Ampere	Ampere	Ampere	Ada Lovelace	Ampere
Passmark	6674	9462	10009	15387	16628
RAM	4GB GDDR6	4GB GDDR6	8GB GDDR6	8GB GDDR6	16GB GDDR6
Cores	CUDA: 2048 Tensor: 64 RT: 16	CUDA: 2048 Tensor: 64 RT: 16	Cuda: 2560 Tensor: 80 RT: 20	Cuda: 3072 Tensor: 96 RT: 24	Cuda: 5888 Tensor: 184 RT: 80
Floating Point Performance	7.28 TFLOPS	6.66 TFLOPS	8.25 TFLOPS	12.99 TFLOPS	14.31 TFLOPS
PCIe	PCIe 4.0 x4	PCIe 4.0 x8	PCIe 4.0 x8	PCIe 4.0 x8	PCIe Gen3.0 x16
Power Consumption	45W	60W	60W	60W	80W
Type	Type-A	Type-A	Type-A	Type-A	Type-B

Blackwell (Available on 2026)

Blackwell RTX 500

- 1792 CUDA Cores, 9.2TF FP32
- 60W & 35W
- 6GB GDDR7

Blackwell RTX 2000

- 3328 CUDA Cores, 17.7 TF FP32
- 60W & 35W
- 8GB GDDR7

L140AD Series Key Features



- 12th generation Intel Processor Family – Alder Lake
- Rugged extreme with 14" 1920 x 1080 LED panel with direct optical bonding
- Anti-glare technology for sunlight readability
- Projective Capacitive Touch supporting switchable Rain/ Glove/ Stylus modes
- Magnesium alloy enclosure with double injection for drop protection
- IP65 waterproof and dustproof
- WiFi-6E & optional WWAN 5G support
- **Dual battery with hot-swappable design for whole-day-work**
- **Options For Second Giga LAN RJ45 Connector**
- **L140AD-4L for Light Version Laptop**

L140 Series Form Factor



L140 Series Upgrade Plan

13.3" & 14"



L140AD-4/ 4L

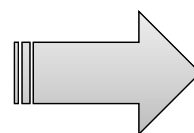
FHD Resolution
Intel Core i5-1235U

L140AD-4K

4K Panel Resolution
Intel Core i5-1235U

L140AD-3

FHD Resolution
Intel Core i5-1235U



**Upgrade to
New Generation**

L140MT-4/ 4L

2026 Q3

FHD Resolution
Intel Core Ultra 5 125U

L140MT-4K

2026 Q3

4K Panel Resolution
Intel Core Ultra 5 125U

L140MT-3

2026 Q3

FHD Resolution
Intel Core Ultra 5 125U

Developing

MP

- Core Ultra processor support - Meteor Lake (P2P with Arrow Lake)
 - Enhanced System Performance & Power Efficiency
 - Intel® AI Boost with integrated NPU
- High-capacity battery pack to extend the battery life
- Built-in Two DRAM slots to enhance system performance
- Docking station supported
- Optional Windows Hello Camera for security applications

L140 Series

Key Features

01

Hot-swappable battery design for uninterrupted operation in field.

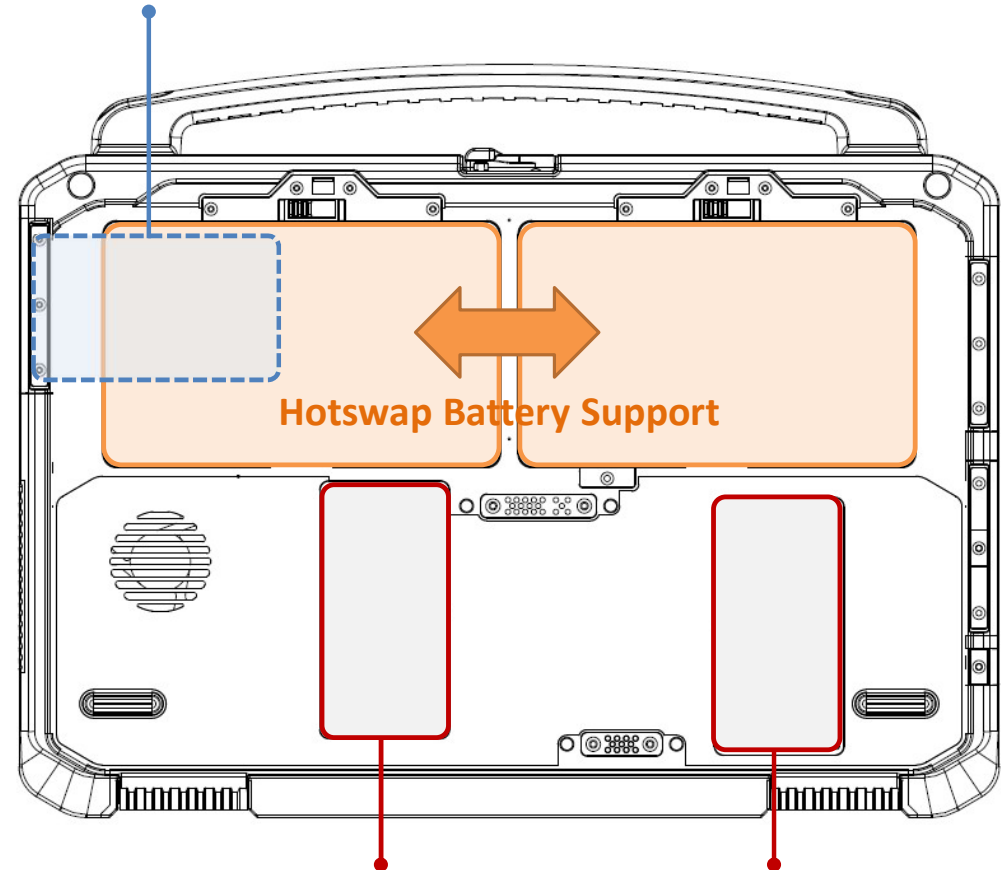
02

Service windows for Main RAM & 2nd SSD replacement.

03

Integrated smart card reader for security applications (fully inserted and sealed).

Integrated Smart Card Reader
(Fully Inserted and sealed)



DDR RAM

2nd M.2 NVMe SSD:
• Storage up to 2TB
• RAID support

L140 / L156

Standard Accessories



01

Adapter and Power Cord

- 100-240VAC to 19.5VDC @ 6.15A
- 100-240VAC to 20VDC @ 11.5A (for M156AD-Mx)
- Country specific power cord available



02

Adapter and Power Cord –M1

- 100-240VAC to 20VDC@11.5A
- Country specific power cords available
- Compatible with L156 series GPU models



03

Standard Battery x 2

- Model Name: BTL156
- 11.55V / 3220 mAh Li-Ion Battery, 3S1P



L140 / L156 Optional Accessories

Battery Charger

- Model Name: BC-L156
- Dual-bay charging dock
- Power level LED indicators
- Buzzer to indicate battery is inserted
- Supports up to 2 set of dock interconnected



Vehicle Charger

- Wide Power Voltage Support
- 12~24V DC IN
- 19V / 6.3A DC OUT



Carry Bag

- With Hand Carrier and Shoulder Strap
- Separated pocket for accessories



High-Capacity Battery

- Model Name: BTL156L
- 4400 mAh Li-Polymer Battery, 3S1P



L140 / L156 Optional Accessories

Vehicle Docking

- Charge the laptop thru docking connector
- Compatible with “Drilling Pattern Docking” mounting solution.
- Security lock supported
- 1 x LAN 10/100/1000 Mbit/s (Real LAN)
- 1 x HDMI output
- 1 x DisplayPort output
- 1 x USB 3.2 (Type C)
- 2 x USB 3.2 (Type A)
- 2 x USB 2.0 (Type A)
- 1 x Audio Jack
- 1 x RS232



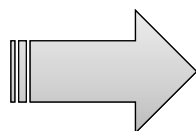
LM140 Series

Key Features



- Intel® Meteor Lake processor built-in, optional for Arrow / Nova Lake processor with NPU (Intel® AI Boost)
- **Optional discrete NVIDIA Graphic card**
- Rugged extreme with 14" 1920 x 1080 LED panel with direct optical bonding
- Projective Capacitive Touch supporting switchable Rain/ Glove/ Stylus modes
- Optional NVIS panel for operating effectively in low-light conditions without compromising
- Magnesium alloy enclosure with bumper for drop protection
- **Dual battery with hot-swappable design for whole-day-work**
- **Removeable SSD design for data security**
- **Optional Fischer connectors for military defense application**

LM140 Series



New Series Laptop

LM140S

FHD Resolution
Intel Nova Lake Processor

LM140S-Q

2026 Q3

FHD Resolution
Qualcomm IQ-X7181 processor

LM140T

2026 Q4

FHD Resolution
Intel Core Ultra 5 125U

LM140T-M1/M2/M3

2026 Q4

FHD Resolution
Intel Core Ultra 7 155H
Discrete GPU

Discrete
GPU

- Intel Core Ultra processor support - Meteor Lake / Arrow Lake / Nova Lake
 - Enhanced System Performance & Power Efficiency
 - Intel® AI Boost with integrated NPU
- Optional Qualcomm IQ-X7181 processor for Arm on Windows
- Optional discrete NVIDIA GPU support
- Removeable SSD design to enhance information security and portability.
- 30 Degree C battery pack Optional
- Optional Fischer connectors for military defense application
- Compliant with MIL-STD-810H / NATO standard STANAG 4370
- Compliant with MIL-STD-461G / NATO standard STANAG 4370 AECTP-500
- Compliant with TEMPEST / NATO SDIP-27 Level B

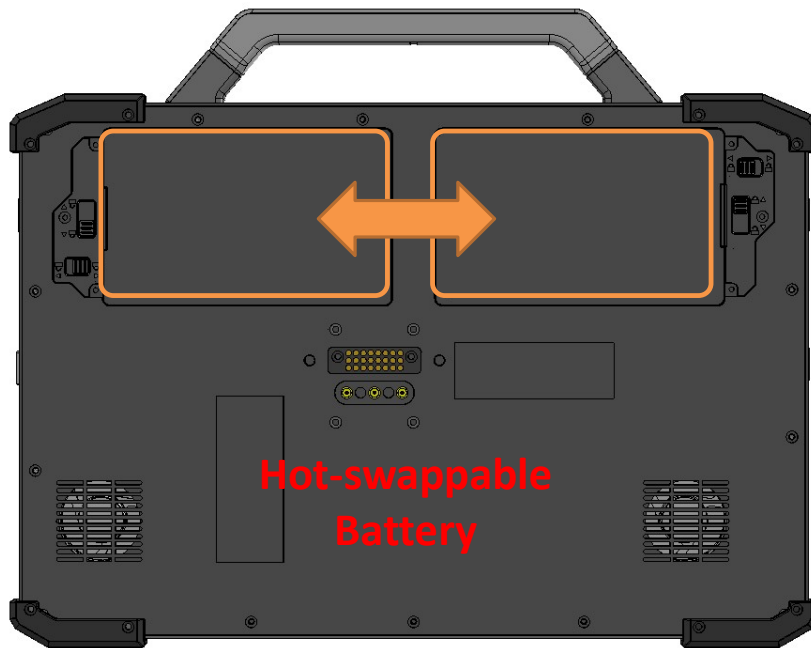
LM140T Series Form Factor



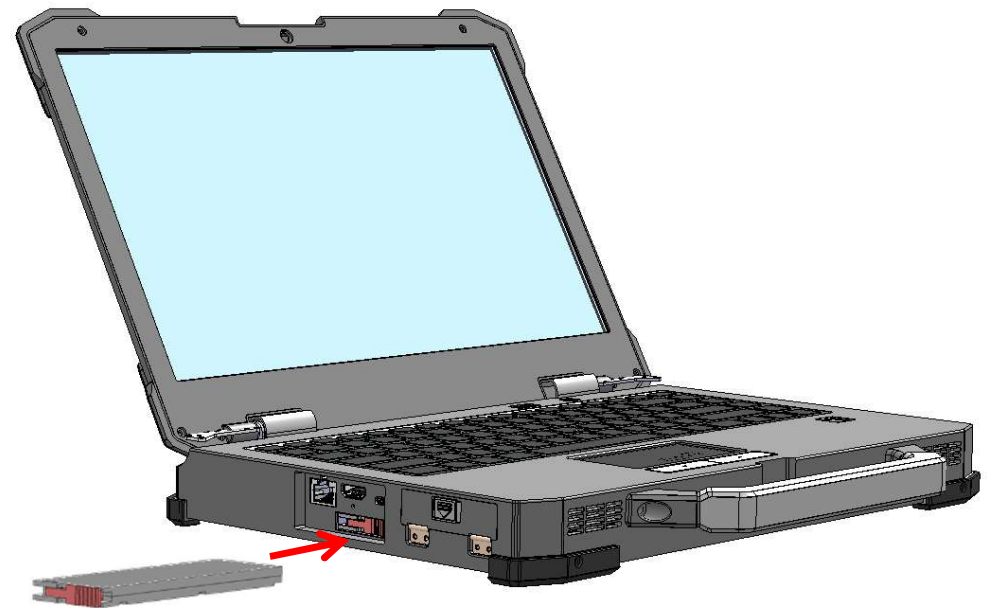
LM140S Series Form Factor



Hot-swappable Battery & Removable SSD



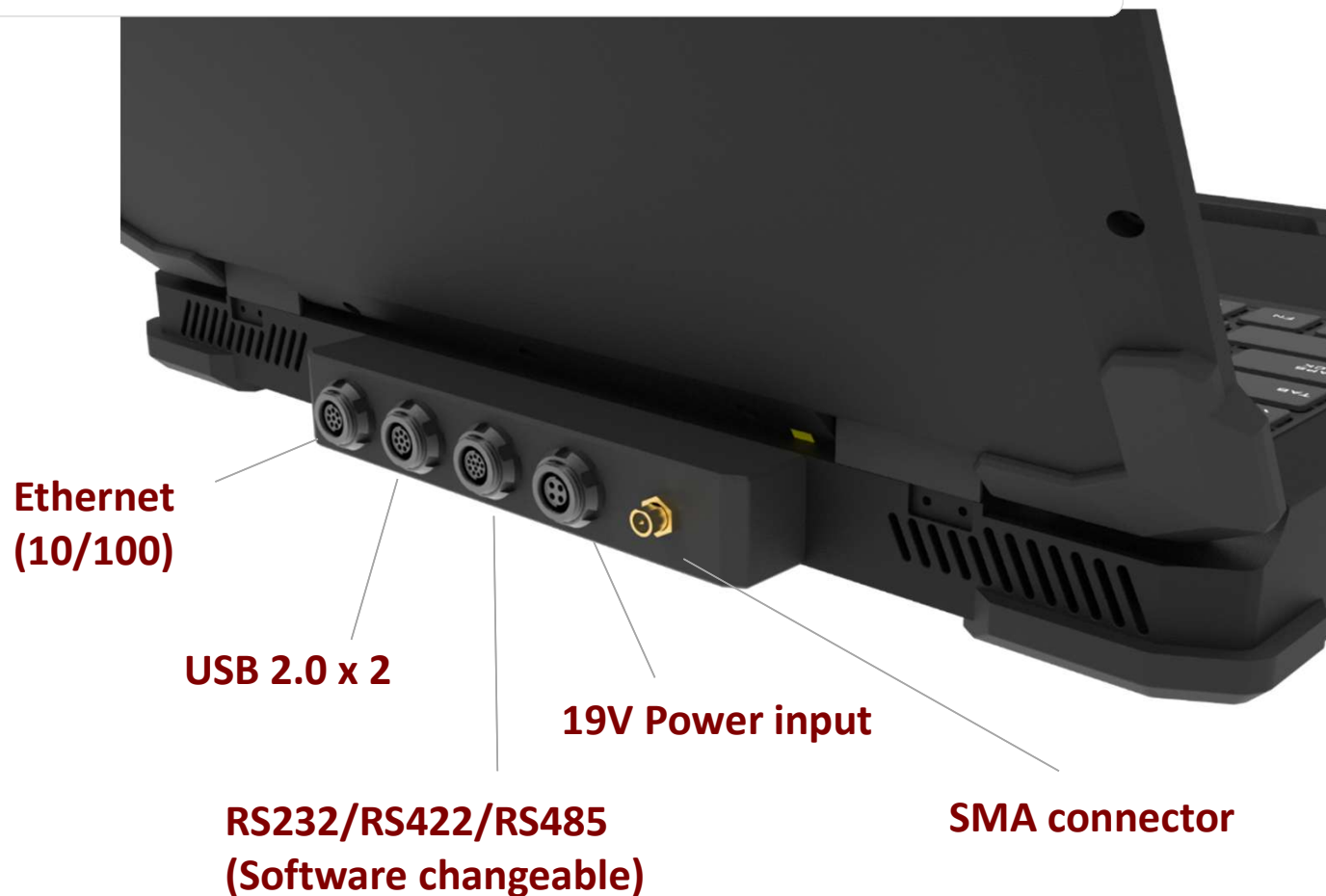
Hot-swappable battery design for un-interrupted operation in field.



Removeable SSD design to enhance information security and portability.

Fischer Connector (Optional)

Fischer connectors to provide options for military and harsh using scenarios





THANK YOU