



THE X7 MILITARY LAPTOP

Sensor-to-Decision in One Unit

Military Rough. GPU & FPGA Smart.

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Intel® Xeon® D

The advanced CPU delivers up to 10-core performance with exceptional efficiency, ensuring robust operation for mission-critical tasks in the field.

Extreme GPU Power

Equipped with the powerful NVIDIA Ada 5000 GPU, the X7 supports accelerated AI inference for real-time data analysis, object detection, and intelligent automation.

Programmable FPGA

The X7's programmable FPGA card delivers exceptional flexibility for custom signal processing, making it ideal for complex and dynamic environments.



2/4 Channel 3G-SDI

Direct connection to the most popular EO/IR cameras with low latency from capture to actionable intelligence.

Dual PoE ports Capability

Dual PoE ports support seamless tactical camera integration for real-time video analysis and field surveillance.

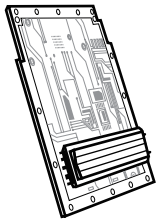
Dual 10G Fiber Connectivity

Integrated 10G fiber SFP+ modules provide high-speed, low-latency links to external sensors.

Swappable NVMe M.2 Storage

Equipped with PCIe 4.0 high-speed NVMe M.2 drives, the X7 offers exceptional throughput and redundancy for fast, reliable mission-critical storage.

Multi-Sensor AI Fusion in One Box



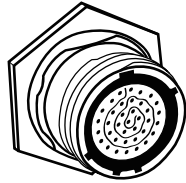
FPGA Expansion via FMC Slot

FMC slot enables FPGA expansion for mission-ready processing, supporting data formats from RF signal acquisition to real-time sensor analysis.



Scalable I/O with IP65 Protection

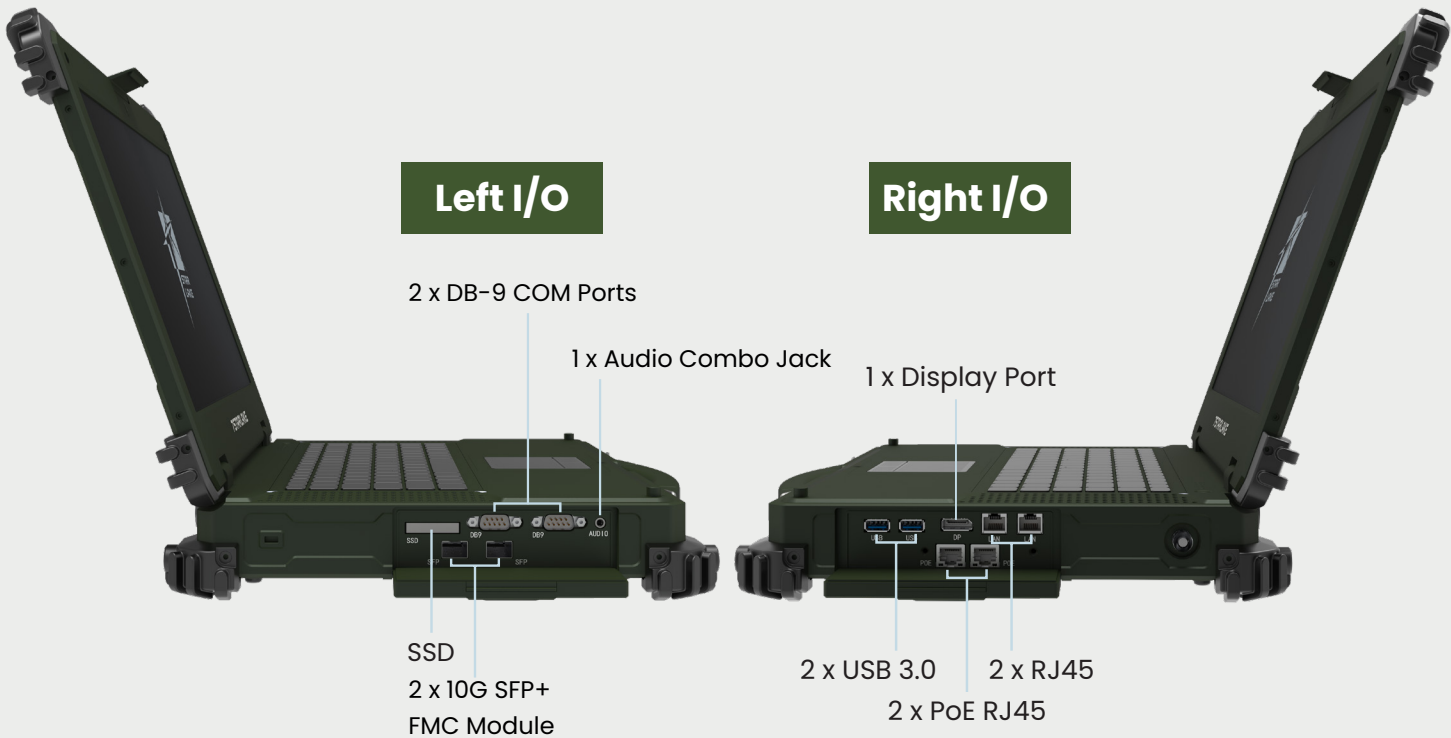
Built for versatility in harsh environments, the X7 delivers a full suite of IP65-protected ports — 2 x USB 3.0, 2 x RJ45, 2 x PoE RJ45, 2 x 10G SFP+, one SSD and dual DB-9 COM interfaces.



Military DTL-38999 Connectors

The MIL-DTL-38999 connectors deliver rugged, secure, and reliable connections for mission-critical deployments.

- From Sensors to Insights — All in One Device
- Simplified Deployment: One Laptop Replaces Multiple Field Devices
- Optimized for AI, RF, EO/IR, and HPC Workloads in Extreme Environments
- Accelerated Integration with SDKs, APIs, and FMC Customization Support



X7-Pro

GPU, FPGA Powered Military Laptop

The Ultimate Visualization Platform with FMC Expansion



CPU

Intel® Xeon D-1848TER,
Intel® i7-13800HRE

GPU

NVIDIA® Ada Lovelace 5000,
NVIDIA® Quadro® A4500

Memory

2 x DDR4, up to 64GB, 32Gb, 16GB
2 x DDR5, up to 64GB, 32GB, 16GB

Display

15.6" TFT LCD FHD (1920 x 1080),
1,000 nits brightness display with
sunlight readable technology,
resistive multi touch screen

Optional: capacitive multi-touch
screen

Storage

2 x NVMe M.2 storage

Keyboard

83-key with backlight, resistive
single-touch touchpad

Ethernet

1 x 10/100/1000 Mbit; 1 x 2.5GbE
Ethernet Ports (One from CPU
module)

Wi-Fi

Intel® Wi-Fi 6E AX210
WLAN 802.11 a/b/g/n/ac/ax
Bluetooth 5.3
Ublox M9N GPS/GLONASS/BeiDou/
Galileo

Camera

1 x 5M webcam

Rugged Feature

Aluminum-Magnesium case
Black or green color
IP65

Left I/O

FMC module (optional)
2 x 10G SFP+
1 x Audio Combo Jack

Right I/O

2 x PoE

Dimensions

395 x 375 x 80/60 mm
(15.55 x 14.76 x 3.15 inch) w/bumpers

Environmental

Operating temp: -20°C to +55°C
Storage temp: -40°C to +71°C

OS (optional)

Windows 10 pro
Windows 11 Pro

Accessories

AC adapter: 300W 100-240VAC,
50/60Hz
MIL-STD-461 AC adapter (300W,
100-240VAC; optional)

Rugged Connector DTL38999

	I/O Ports (with cover)	DTL38999 Part No.
I/O Rear	X1: DC-IN	0C1231120040003L
	X2: 2 x USB2.0+8 x GPIO + 2 x RS232/422/485	0C1231120370008L
	X3: 1 x DP	0C1231120370008L
	X4: Optional	0C1231120370008L
	X5: 2 x 3G-SDI	0C1231120020002L

X7-Max

A GPU based Military Laptop

The Ultimate Visualization Platform



CPU
Intel® Core™ i7-13800HRE, Intel® Core™ i5-13600HRE
GPU
NVIDIA® Quadro® A4500/A2000/ A1000, NVIDIA® GeForce® GTX 1050Ti
Memory
2 x DDR5 up to 64GB, 32GB, 16GB
Display Controller
Intel® Iris® Xe Graphics/UHD graphics architecture
Display
15.6" TFT LCD FHD (1920 x 1080) Up to 1,000 nits brightness display with sunlight readable technology Resistive multi touch screen or non-touch Optional: capacitive multi-touch screen
Storage
2 x NVMe M.2 storage
Keyboard
83-key with backlight, resistive single-touch touchpad
Ethernet
2 x 2.5GbE & 10/100/1000Mbit Ethernet Ports (One from CPU module)
Wi-Fi
Intel® Wi-Fi 6E AX210 WLAN 802.11 a/b/g/n/ac/ax Bluetooth 5.3 Ublox M9N GPS/GLONASS/BeiDou/ Galileo

Camera
1 x 5M Webcam
Rugged Feature
Aluminum-Magnesium case Black or green color IP65
Left I/O
2 x RS232/422/485 2 x 10G SFP+ (optional) 1 x Audio Combo Jack
Right I/O
2 x USB3.0 1 x DP 2 x RJ45 2 x PoE (optional)

Dimensions
395 x 375 x 60 mm (15.55 x 14.76 x 2.36 inch) w/bumpers
Environmental Spec
Operating temp: -20°C to +55°C Storage temp: -40°C to +71°C
OS (optional)
Windows 10 pro Windows 11 Pro
Accessories
AC adapter: 300W 100-240VAC, 50/60Hz MIL-STD-461 AC adapter (300W, 100-240VAC; optional)
Power
19V DC-IN Lockable Connector

MIL-STD 810/461 Certification

MIL-STD-810 Vibration Method 514.6: ☉ Acceleration: 5.0 Grms
MIL-STD-810 Vibration Method 514.6: ☉ PSD: 0.01257 g2/Hz
MIL-STD-810 Shock Method 516.6: ☉ Wave Form: Half Shine Wave
MIL-STD-810 Shock Method 516.6: ☉ Acceleration: 20G
MIL-STD-810 Temperature Method 501.5 502.5: ☉ Operating Temp High: 55°C
MIL-STD-810 Temperature Method 501.5 502.5: ☉ Operating Temp Low: -30°C

X7-Rugged

A GPU based Military Laptop

The Ultimate Visualization Platform



CPU
Intel® Core™ i7-13800HRE, Intel® Core™ i5-13600HRE
GPU
NVIDIA® Quadro® A1000, NVIDIA® GeForce® GTX 1050T
Memory
2 x DDR5 up to 64GB, 32GB, 16GB
Display Controller
Intel® Iris® Xe Graphics/UHD graphics architecture
Display
15.6" TFT LCD FHD (1920 x 1080) Up to 1,000 nits brightness display with sunlight readable technology Resistive multi touch screen or non-touch Optional: capacitive multi-touch screen
Storage
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2 x 2.5GbE & 10/100/1000Mbit Ethernet Ports (One from CPU module)
Wi-Fi
Intel® Wi-Fi 6E AX210 WLAN 802.11 a/b/g/n/ac/ax Bluetooth 5.3 Ublox M9N GPS/GLONASS/BeiDou/ Galileo

Camera
1 x 5M Webcam
Rugged Feature
Aluminum-Magnesium case Black or green color IP65
Left I/O
2 x RS232/422/485 1 x Audio Combo Jack
Right I/O
2 x USB3.0 1 x DP 2 x RJ45

Dimensions
395 x 375 x 60 mm (15.55 x 14.76 x 2.36 inch) w/bumpers
Environmental Spec
Operating temp: -20°C to +55°C Storage temp: -40°C to +71°C
OS (optional)
Windows 10 pro Windows 11 Pro
Accessories
AC adapter: 230W 100-240VAC, 50/60 Hz MIL-STD-461 AC adapter (230W, 100-240VAC; optional)

Rugged Connector DTL38999

I/O Ports (with cover)	
I/O Rear	X1: 1 x DC-IN X2: 1 x GLAN X3: 1 x GLAN

MIL-STD 810/461 Certification

MIL-STD-810 Vibration Method 514.6: ☉ Acceleration: 5.0 Grms
MIL-STD-810 Vibration Method 514.6: ☉ PSD: 0.01257 g2/Hz
MIL-STD-810 Shock Method 516.6: ☉ Wave Form: Half Shine Wave
MIL-STD-810 Shock Method 516.6: ☉ Acceleration: 20G

Ordering Information

X7-Max

A GPU based Military Laptop

X7

GPU & FPGA Military Laptop



X7-Pro		X7-Max					X7-Rugged						
Ordering information		X7-PIA50	X7-PIA45	X7-MIA45	X7-MIA20	X7-MIA10	X7-MIG10	X7-RIA10A	X7-RIA10B	X7-RIA10C	X7-RIG10A	X7-RIG10B	X7-RIG10C
CPU (Intel 13/14 th -H series)		Xeon D-1848TER	i7-13800HRE	i7-13800HRE	i5-13600HRE	i7-13800HRE	i5-13600HRE	i7-13800HRE	i7-13800HRE	i7-13800HRE	i5-13600HRE	i5-13600HRE	i5-13600HRE
GPU (NVIDIA Quadro)		Ada 5000	A4500	A4500	A2000	A1000	1050Ti	A1000	A1000	A1000	1050Ti	1050Ti	1050Ti
LCD	Brightness	1000 nits	1000 nits	1000 nits	1000 nits	350 nits	350 nits	350 nits	1000 nits	1000 nits	350 nits	1000 nits	1000 nits
	Touch	Touch	Touch	Touch	Touch	Non-Touch	Non-Touch	Non-Touch	Non-Touch	Touch	Non-Touch	Non-Touch	Touch
	Bonding	Optical bonding	Optical bonding	Optical bonding	Optical bonding	Air bonding	Air bonding	Air bonding	Air bonding	Optical bonding	Air bonding	Air bonding	Optical bonding
RAM		DDR4 16GB	DDR5 16GB	DDR5 16GB	DDR5 16GB	DDR5 16GB	DDR5 16GB	DDR5 16GB	DDR5 16GB	DDR5 16GB	DDR5 16GB	DDR5 16GB	DDR5 16GB
Storage 1		256GB	256GB	256GB	256GB	256GB	256GB	256GB	256GB	256GB	256GB	256GB	256GB
Storage 2		M.2 option	M.2 option	M.2 option	M.2 option	M.2 option	M.2 option	M.2 option	M.2 option	M.2 option	M.2 option	M.2 option	M.2 option
Left I/O	2 x RS232/422/485	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	FMC module	Optional	-	-	-	-	-	-	-	-	-	-	-
	2 x 10G SFP+	Yes	Optional	Yes	-	Yes	-	-	-	-	-	-	-
	1 x Audio Combo Jack	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Right I/O	2 x USB3.0	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	1 x DP	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	2 x RJ45	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	2 x PoE	Yes	Yes	Yes	-	-	-	-	-	-	-	-	-
Rear I/O (D38999)	X1: DC-IN	Yes	Yes	None, Lockable Connector	None, Lockable Connector	None, Lockable Connector	None, Lockable Connector	Yes	Yes	Yes	Yes	Yes	Yes
	X2: 2 x USB2.0 + 8 x GPIO + 2 x RS232/422/485	Yes	Yes	Yes	-	-	-	1 x GLAN	1 x GLAN	1 x GLAN	1 x GLAN	1 x GLAN	1 x GLAN
	X3: 1 x DP	Yes	Yes	Yes	-	-	-	1 x GLAN	1 x GLAN	1 x GLAN	1 x GLAN	1 x GLAN	1 x GLAN
	X4: Optional	Yes	Yes	Yes	-	-	-	-	-	-	-	-	-
	X5: 2 x 3G-SDI	Yes	Yes	Yes	-	-	-	-	-	-	-	-	-

7STARLAKE



THE X7 MILITARY LAPTOP

Sensor-to-Decision in One Unit

From Sensor to Insight in One Device

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