



V7-PRO

**GPU & FPGA-POWERED LAPTOP
SENSOR-TO-DECISION IN ONE UNIT**



- Intel® Xeon® Ice Lake D-1848TER (10C/20T) or Intel® Core™ i7-13800HRE
- NVIDIA Quadro Ada 5000 (9728 CUDA) /A4500 (5888 CUDA)
- FMC Slots – FPGA Based Capability
- FHD 1000 Nits Sunlight Readable
- Dual 10G Fiber Connectivity
- 2 x PoE Ports, Tactical Camera Support
- Swappable NVMe M.2 Storage
- 4 Channel 3G-SDI, Multi-Video Data Input
- Military DTL-38999 Connectors
- IP65/MIL-STD-810/461 for Extreme Temperatures, Shock and Vibration
- Extended Temperature -20°C ~+55°C

INTRODUCTION

Military Tough. GPU & FPGA Smart. Engineered for modern battlefields, 7STARLAKE's 15.6" Military Laptop X7-Pro delivers unmatched performance and unyielding versatility. Powered by Intel® Xeon® D processor, Nvidia GPU and FMC expansion, the X7-Pro brings high-performance edge computing to mission-critical operations.

With dual 10G SFP+ ports, dual PoE, 4 Channel 3G-SDI, and Swappable NVMe M.2 storage, the ruggedized X7-Pro ensures non-stop tactical readiness. Its sunlight-readable multi-touch display, IP65-rated waterproof housing, and resilience to extreme temperatures make it a reliable asset across land, sea, and air operations. Whether supporting AI-powered decision-making, C4ISR, SIGINT, or UGV/UAV Console, the X7-Pro is more than a rugged laptop. It's built to meet intelligent warfare.

Appearance



ORDER INFORMATION



Ordering information		X7-Pro	
Model Type		X7-P8	X7-P6
Model No.		X7-PIA50	X7-PIA45
CPU (Intel 13/14th -H series)		i7-13800HRE	i7-13800HRE
LCD	Brightness	1000 nits	1000 nits
	Touch	Touch	Touch
	Bonding	Optical bonding	Optical bonding
GPU (NVIDIA Quodra GPU)		Ada 5000	Ada 4500
RAM (SO-DIMM)		DDR5 16GB	DDR5 16GB
Storage 1		256GB	256GB
Storage 2		M.2 option	M.2 option
Left I/O	2 x RS232/422/485	No	No
	FMC module	Option	No
	2 x 10G SFP	Yes	Optional
Right I/O	2 x USB3.0	No	No
	1 x DP	No	No
	2 x RJ45	No	No
	2 x PoE	Yes	Yes
Rear I/O			
X1	DC-IN	Yes	Yes
X2	2 x USB2.0 +8 x GPIO + 2x RS232/422/485	Yes	Yes
X3	1 x DP + 1 x VGA	Yes	Yes
X4	Option	Yes	Yes
X5	2 x 3G-SDI	Yes	Yes

SPECIFICATIONS

SYSTEM

CPU	Intel® Xeon® D-1848TER, 10C/ 20T, 2.0/3.1GHz, 15MB cache, 57W Intel® Core i7-13800HRE, 6P+8E/20T, 2.5/5.0GHz, 24MB cache, 65W
Memory	2 x DDR4, SO-DIMM, up to 64GB 2 x DDR5, SO-DIMM, up to 64GB
GPU	NVIDIA® RTX ADA 5000 NVIDIA® QUADRO A4500

DISPLAY

Display	15.6" TFT LCD FHD (1920 x 1080), 1,000 nits brightness display Sunlight readable, resistive multi touch screen Optional: Capacitive multi-touch screen
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OPERATING SYSTEM

OS Support	Windows 10 pro Windows 11 Pro
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STORAGE

Storage	2 x NVMe M.2 storage
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POWER

Power	230W 100-240VAC, 50/60Hz
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DIMENSIONS

Dimensions	395 x 375 x 80 mm (15.55 x 14.76 x 3.15 inch)
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BACK I/O (RUGGED CONNECTOR DTL38999)

X1	DC-IN
X2	2 x USB2.0 + 8 x GPIO + 2 x RS232/422/485
X3	1 x DP
X4	Optional
X5	2 x 3G-SDI (optional)

LEFT I/O

Left I/O	2 x 10G SFP+ (optional) 1 x Audio Combo Jack FMC module (optional)
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RIGHT I/O

Right I/O	2 x PoE
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CAMERA	
Camera	1 x 5M webcam
WIRELESS	
Wi-Fi	Intel® Wi-Fi 6E AX210 WLAN 802.11 a/b/g/n/ac/ax
Bluetooth	Bluetooth 5.3 Ublox M9N GPS/GLONASS/BeiDou/ Galileo
KEYBOARD	
Keyboard	83-key with backlight, resistive
RUGGED FEATURE	
Rugged Feature	IP65, Aluminum-Magnesium Alloy Case Black or Green Color
ENVIRONMENT	
Operating Temp	-20°C to +55°C
Storage Temp	-40°C to +71°C
ACCESSORIES	
Accessories	AC adapter: 230W 100-240VAC, 50/60Hz MIL-STD-461 AC adapter (230W, 100-240VAC)
MIL-STD-810 ENVIRONMENT TESTING STANDARDS	
Method 501, Operational Temperature, high	Procedure II: +60°C, two-hour dwell, four cycles
Method 501, Storage Temperature, high	Procedure I: +75°C, two-hour dwell, four cycles
Method 502, Operational Temperature, low	Procedure II: -40°C, two-hour dwell, four cycles
Method 502, Storage Temperature, low	Procedure I: -40°C, two-hour dwell, four cycles
Method 514, Vibration	Category 24/Non-Operating (Category 20 & 24, Vibration)
Method 514, Vibration	Category 20/Operating (Category 20 & 24, Vibration)
Method 516, Shock	Procedure V Non-Operating (Mechanical Shock)
Method 516, Shock	Procedure I Operating (Mechanical Shock)

Method 507, Humidity	Procedure II: exposure to 10 cycles of 95% relative humidity at temperatures of 30 °C to 60 °C with conformal coating (optional)
Method 500, Altitude (Low Pressure)	15,000 feet transport, -200÷2500[m] ground operation and exposed to +55°C and -20°C operation (optional)
Method 510, Sand-Dust	Procedure I: Blasting dust, 12 hours (optional)

MIL-STD-461 ELECTROMAGNETIC TESTING STANDARDS

CE102	Conducted emissions, power leads, 10KHz to 10MHz
RE102	Radiated emissions, electric field, 30MHz to 5GHz
RS103	Radiated susceptibility, electric field, 80Mhz to 3GHz

ORDERING INFORMATION

X7-P8	Xeon® D-1848TER CPU
X7-P6	Core i7-13800HRE CPU

This datasheet is for marketing purposes only and does not constitute a warranty. All specifications, dimensions, and data are subject to change without notice. For the latest specifications and updates, please contact your 7STARLAKE representatives.