



# 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 Blackwell 5000 (14,080 CUDA) / 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
- 2 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



LAND



SEA



AIR



# 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, 2 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



## X7-Pro

Model		X7-PIB50	X7-PIA50	X7-PIA45
CPU (Intel 13/14th -H series)		i7-13800HRE	i7-13800HRE	i7-13800HRE
GPU		Blackwell 5000	Ada 5000	A4500
LCD	Brightness	1000 nits	1000 nits	1000 nits
	Touch	Touch	Touch	Touch
	Bonding	Optical bonding	Optical bonding	Optical bonding
RAM		DDR5 16GB	DDR5 16GB	DDR5 16GB
Storage 1		256GB	256GB	256GB
Storage 2		M.2 option	M.2 option	M.2 option
Left I/O	2 x RS232/422/485	Yes	Yes	Yes
	2 x 10G SFP+	Yes	Yes	Yes
	1 x Audio Combo Jack	Yes	Yes	Yes
Right I/O	2 x USB3.0	Yes	Yes	Yes
	1 x DP	Yes	Yes	Yes
	2 x RJ45	Yes	Yes	Yes
	2 x PoE	Yes	Yes	Yes
Rear I/O (D38999)	X1: DC	Yes	Yes	Yes
	X2: LAN	Yes	Yes	Yes
	X3: LAN	Yes	Yes	Yes
	X4: 3G-SDI	Optional	Optional	Optional
	X5: 8 BIT GPIO	Optional	Optional	Optional

# 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® Blackwell 5000 (14,080 CUDA Cores) NVIDIA® RTX Ada 5000 (9,728 CUDA Cores) NVIDIA® Quadro A4500 (5,888 CUDA Cores)

## 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	LAN
X3	LAN
X4	3G-SDI (optional)
X5	8 BIT GPIO (optional)

## LEFT I/O

Left I/O	2 x 10G SFP+ 2 x RS232/422/485 1 x Audio Combo Jack
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	FMC module (optional)
<b>RIGHT I/O</b>	
Right I/O	2 x PoE 2 x USB 3.0 1 x DP 2 x RJ45
<b>CAMERA</b>	
Camera	1 x 5M webcam
<b>WIRELESS</b>	
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
<b>KEYBOARD</b>	
Keyboard	83-key with backlight, resistive
<b>RUGGED FEATURE</b>	
Rugged Feature	IP65, Aluminum-Magnesium Alloy Case Black or Green Color
<b>ENVIRONMENT</b>	
Operating Temp	-20°C to +55°C
Storage Temp	-40°C to +71°C
<b>ACCESSORIES</b>	
Accessories	AC adapter: 230W 100-240VAC, 50/60Hz MIL-STD-461 AC adapter (230W, 100-240VAC)
<b>MIL-STD-810 ENVIRONMENT TESTING STANDARDS</b>	
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 filed, 30MHz to 5GHz
RS103	Radiated susceptibility, electric filed, 80Mhz to 3GHz

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.