



LAND



SEA



AIR

N7-RUGGED

GPU-POWERED MILITARY LAPTOP
SENSOR-TO-DECISION IN ONE UNIT



- Intel® 13th Gen Core™ i7/i5 Processors
- NVIDIA Quadro A1000/1050Ti
- FHD 350 & 1000 Nits Sunlight Readable Multi-touch Display or Non-touch
- 2 x GLAN Ports with D38999 connector
- Swappable NVMe M.2 Storage (optional)
- IP65/MIL-STD-810/461 for Extreme Temperatures, Shock and Vibration
- Extended Temperature -20°C ~+55°C



INTRODUCTION

Military GPU Smart. Engineered for modern battlefields, 7STARLAKE's 15.6" Military Laptop X7-Rugged delivers unmatched performance and unyielding versatility. Powered by Intel® 13th Gen Core™ i7/i5 Processors and Nvidia Quadro GPU, the X7-Rugged brings effective-performance edge computing to mission-critical operations.

With dual GLAN ports (D38999 connectors) and swappable NVMe M.2 storage, the X7-Rugged ensures non-stop tactical readiness. Its sunlight-readable multi-touch display, IP65 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-Rugged is more than a rugged laptop. It's built to meet intelligent warfare.

Appearance



SPECIFICATIONS

SYSTEM

CPU	Intel® i7-13800HRE, i5-13600HRE
Memory	2 x DDR5 8GB SO-DIMM, up to 64GB, 32GB or 16GB
GPU	NVIDIA® RTX A1000/ 1050Ti

DISPLAY

Display	15.6" TFT LCD FHD (1920 x 1080), 350/1,000 Nits Brightness Display Sunlight readable, P-capacitive multi-touch screen or non-touch
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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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ETHERNET

Ethernet	2 x RJ45 2.5 Gigabit
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POWER

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

Dimensions	395 x 375 x 60 mm (15.55 x 14.76 x 2.36 inch)
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BACK I/O (RUGGED CONNECTOR DTL38999)

X1	DC-IN
X2	1 x GLAN port
X3	1 x GLAN port

LEFT I/O

Left I/O	2 x RS232/ 422/ 485 1 x Audio Combo Jack 2 x 10G SFP+ (optional)
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RIGHT I/O

Right I/O	2 x USB 3.0 1 x DP 2 x RJ45
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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 filed, 30MHz to 5GHz

RS103 Radiated susceptibility, electric filed, 80Mhz to 3GHz

ORDER INFORMATION



Ordering information		X7-Rugged					
Model No.		X7-RIA10A	X7-RIA10B	X7-RIA10C	X7-RIG10A	X7-RIG10B	X7-RIG10C
CPU (Intel 13th)		i7-13800HRE	i7-13800HRE	i7-13800HRE	i5-13600HRE	i5-13600HRE	i5-13600HRE
LCD	Brightness	350 nits	1000 nits	1000 nits	350 nits	1000 nits	1000 nits
	Touch	Non-Touch	Non-Touch	Touch	Non-Touch	Non-Touch	Touch
	Bonding	Air bonding	Air bonding	Optical	Air bonding	Air bonding	Optical
GPU (NVIDIA GPU)		A1000	A1000	A1000	RTX 1050Ti	RTX 1050Ti	RTX 1050Ti
RAM (SO-DIMM)		DDR5 16GB					
Storage 1		256GB	256GB	256GB	256GB	256GB	256GB
Storage 2		M.2 option					
Left I/O	2 x RS232/422/485	Yes	Yes	Yes	Yes	Yes	Yes
	Audio Combo Jack	Yes	Yes	Yes	Yes	Yes	Yes
Right I/O	2 x USB3.0	Yes	Yes	Yes	Yes	Yes	Yes
	1 x DP	Yes	Yes	Yes	Yes	Yes	Yes
	2 x RJ45	Yes	Yes	Yes	Yes	Yes	Yes
Rear I/O							
X1	DC-IN	Yes	Yes	Yes	Yes	Yes	Yes
X2	3G-SDI	1x GLAN					
X3	3G-SDI	1x GLAN					

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.