



LAND



SEA



AIR

HORUS430-K1A45

**GPGPU-BASED RADAR SUBSYSTEM BY NVIDIA
RTX A4500 AND INTEL GEN 11TH PROCESSOR**



- Intel® Core™ i7-11850HE Processor
- NVIDIA MXM RTX A4500 (CUDA 5888)
- Extreme Temperature -40~+55 degree
- MIL-STD 461/1275 EMI Filter 18V~36V
- DTL38999 Military Connector
- IP65



Specifications

SYSTEM

CPU	Intel® 11th Tiger-Lake i7-11850HE (2.6 GHz, up to 4.7 GHz, 8-cores, 16 threads)
Memory type	DDR4-2666 Up to 64GB (ECC for Options)

DISPLAY

GPU	NVIDIA MXM RTX A4500 (CUDA 5888)
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STORAGE

Storage	2 x mSATA, up to 1TB
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ETHERNET

LAN	2 x Intel I350-AM2 Gigabit LAN Interfaces (10/100/1000Mbps)
10GbE	2 x 10GbE supported

FRONT I/O

X1, X2	2 x 10G LAN MIL-38999 22Pin connector(LCFTV70GN)
X3, X4	2 x 1G LAN MIL-38999 10Pin connector (TV07RW-13-98S)
X5	1 x RS232 MIL-38999 10Pin connector (TV07RW-13-98SC)
X6	4 x USB MIL-38999 22Pin connector (AMPHENOL TV07RW-13-35SD)
X7, X8	2 x DVI MIL-38999 22Pin connector (TV07RW-13-35S)
DC-IN	1 x DC-IN MIL-38999 22Pin connector (AMPHENOL TV07RW13-4P)

POWER REQUIREMENT

Power Input	18V~36V DC-DC 300W
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APPLICATIONS, OPERATING SYSTEM

Application	Energy/Smart Grid/Power Plant Management, Intelligent Automation and manufacturing applications
OS	Windows 10 64Bit Ubuntu13.04, Ubuntu13.10, Ubuntu14.04, Fedora 20
EMC	EN 61000-4-2: Air discharge: 8 kV, Contact discharge: 6kV EN 61000-4-3: 10V/m EN 61000-4-4: Signal and DC-Net: 1 kV EN 61000-4-5: Leads vs. ground potential 1kV, Signal und DC-Net: 0.5 kV CE and FCC MIL-STD-461 (Options):

	<p>CE102 basic curve, 10kHz - 30 MHz RE102-4, (1.5 MHz) -30 MHz - 5 GHz RS103, 1.5 MHz - 5 GHz, 50 V/m equal for all frequencies</p>
MIL-STD-810	<p>Method 500.5, Procedures I and II (Altitude, Operation): 12,192M, (40,000 ft) for the initial cabin altitude (18.8Kpa or 2.73 Psia) Method 500.5, Procedures III and IV (Altitude, Non-Operation): 15,240, (50,000 ft) for the initial cabin altitude (14.9Kpa or 2.16 Psia) Method 501.5, Procedure I (Storage/High Temperature) Method 501.5, Procedure II (Operation/High Temperature) Method 502.5, Procedure I (Storage/Low Temperature) Method 502.5, Procedure II (Operation/Low Temperature) Method 503.5, Procedure I (Temperature shock) Method 507.5, Procedure II (Temperature & Humidity) Method 514.6, Vibration Category 24/Non-Operating (Category 20 & 24,Vibration) Method 514.6, Vibration Category 20/Operating (Category 20 & 24,Vibration) Method 516.6, Shock-Procedure V Non-Operating (Mechanical Shock) Method 516.6, Shock-Procedure I Operating (Mechanical Shock)</p>
Reliability	<p>Conduction Cooling. Designed & Manufactured using ISO 9001 Certified Quality Program.</p>
MIL-STD-461	<p>CE102 basic curve, 10kHz - 30 MHz RE102-4, (1.5 MHz) -30 MHz - 5 GHz RS103, 200 MHz - 3.2 GHz, 50 V/m equal for all frequencies EN 61000-4-2: Air discharge: 8 kV, Contact discharge: 6kV EN 61000-4-3: 10V/m EN 61000-4-4: Signal and DC-Net: 1 kV EN 61000-4-5: Leads vs. ground potential 1kV, Signal und DC-Net: 0.5 kV CE and FCC</p>
MIL-STD-1275	<p>Steady State – 20V~33V, Surge Low – 18V/500ms, Surge High – 100V/500ms Emitted spikes Injected Voltage surges Emitted voltage surges Voltage ripple (2V) Voltage spikes Starting Operation Reverse polarity</p>
Operating Temp.	-20 to +60°C
Storage Temp.	-40 to +85°C
Relative Humidity	5% to 95%, non-condensing.

3 Order Information

HORUS430-X1

GPGPU-based radar subsystem with Intel® 9th Gen Core i7-9850HE, RTX A2000 MXM, IP65, 18V-36V, support MIL-STD-461, MIL-STD-810G. with MIL-DTL-D38999 Connectors, Operating Temp. -40 to +55°C

HORUS430-X2

GPGPU-based radar subsystem with Intel® 11th Gen Core i7-11850HE, RTX A4500 MXM, IP65, 18V-36V, support MIL-STD-461, MIL-STD-810G. with MIL-DTL-D38999 Connectors, Operating Temp. -40 to +65°C

4 Appearance



5 Dimension

