



LAND



SEA



AIR

AV600TH-A20-PA1

Military IP66 Mission GPU Computer



- MIL-STD 810 Thermal, shock, vibration, Humidity / EMI / EMC conditions
- IP65 Chassis with D38999 connectors
- Intel® W-11865MRE, up to 8 cores
- 64GB DDR4 SO-DIMM ECC or non ECC support
- NVIDIA RTX™ A2000 MXM 8GB GDDR6
2560 CUDA cores
- 2.5" SATA SSD Easy Swap Tray
- 1 x 3D-SDI Capture Card
- MIL-STD-461 18V~36V DC-Input
- Extreme Temperature: -20 to 55°C degree

Specifications

SYSTEM

CPU	Intel® 11 gen. Tiger Lake W-11865MRE Processors, 2.60GHz Max 4.70GHz up to 8 cores, integrated Intel® UHD Graphics
Memory type	64GB DDR4 SO-DIMM ECC or non ECC support
CHIPSET	Intel® RM590E (support ECC, with Xeon CPU) /QM580E
GPGPU	NVIDIA RTX™ A2000 GA104-955 GPU 8GB GDDR6 memory, 2560 CUDA cores

VIDEO CAPTURE

SDI	1 x 3D-SDI Capture Card
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UART

COM	1 x RS232, 2 x RS422/485
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STORAGE

SATA	2.5" SSD, Hot Swappable SSD/HDD slot
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ETHERNET

Ethernet	2 x 10/100/1000 Ethernet Ports
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DISPLAY

DVI	1 support NTSC/PAL
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FRONT I/O

X1	1 x DVI (NTSC/PAL) +1x RS232, 2 x RS422/485 +USB2.0, with D38999 Nickel plating connector
X2	2 x Giga LAN, with D38999 Nickel plating connector
X3	1 x USB3.0 , with D38999 Nickel plating connector
X4	1 x USB3.0 , with D38999 Nickel plating connector
X5	1 x DC-in , with D38999 Nickel plating connector
LED	1 x SSD/HDD LED indicator
switch	1 x IP66 power button , with LED indicator
SSD	2.5" Easy swap SSD Tray

POWER

Power input	MIL-STD-461 18V~36V DC-Input
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OPERATING SYSTEM

OS	Windows® 10 or 11(TPM 2.0 By Request) 64-bit Linux (support by request)
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PHYSICAL

Dimension	250(L) x 313.5 (W) x 100 (H)mm
Weight	10Kg (22 lbs.)
Chassis	SECC
Heatsink	Heatsink Aluminum Alloy, Corrosion Resistant

ENVIRONMENTAL

Green Product	RoHS, WEEE compliance
Operating Temp.	-20 to 55°C
Storage Temp.	-40 to 85°C
Relative Humidity	5% to 95%, non-condensing

MIL-STD-810 SPECIFICATIONS (OPERATING)

Method 502.5 Procedure 2	Low Temperature	-20°C, 4 hours, ±3°C
Method 501.5 Procedure 2	High Temperature	+55°C, 4 hours, ±3°C
Method 507.5	Humidity	85%-95% RH without condensation, 24 hours/ cycle, conduct 10 cycles.
Method 514.6	Vibration	5-500Hz, Vertical 2.20Grms, 40mins x 3axis.
Method 516.6	Shock	20 Grms, 11ms, 3 axes.

MIL-STD-810 SPECIFICATIONS (NONE-OPERATING)

Method 502.5 Procedure 1	Low Temperature Storage	-40°C, 4 hours, change rate: ≤ 20°C/ Hour -15°C, 72hours (By request)
Method 501.5 Procedure 1	High Temperature Storage	+71°C, 4 hours, change rate: ≤ 20°C/ Hour +63°C, 240 hours (By request)
Method 514.6	Vibration	5-500Hz, Vertical 2.20Grms, 40mins x 3axis.
Method 516.6	Shock	20 Grms, 11ms, 3 axes.

MIL-STD-461

Conducted Emissions Power Leads	CE102	10kHz – 10MHz
Radiated Emissions, Electric Field	RE102	1.5MHz -30MHz - 5.0 GHz
Radiated Susceptibility Electric Field	RS103	2MHz – 80MHz, 50 V/m
		80MHz – 3GHz, 50 V/m
		3GHz – 5GHz, 50 V/m

MIL-STD-704 (BY REQUEST)

LDC101	Load Measurements
LDC102	Steady State Limits for Voltage
LDC103	Voltage Distortion Spectrum
LDC104	Total Ripple
LDC105	Normal Voltage Transients
LDC201	Power Interrupt
LDC301	Steady State Limits for Voltage
LDC401	Steady State Limits for Voltage
LDC501	Starting Voltage Transients
LDC601	Power Failure
LDC602	Phase Reversal

MIL-STD-1275 (BY REQUEST)

Steady State	20V-33V
Surge Low	18V/500ms
Surge High	100V/500ms