



Sentry-X Rugged Embedded System

Connect Tech's Sentry-X Rugged Embedded System is built for the NVIDIA® Jetson AGX Xavier™, bringing out a wide assortment of I/O. Features included in this embedded system include 2x GbE, 3x USB 3.1, 2x HDMI, 2x CAN 2.0b, 1x RS-232, 1x RS-422/485, 1x UART 3.3V TTL, and 8x GPIO.

Sentry-X is designed to meet MIL-STD-810G as well as DO-160G for shock and vibration along with ingress protection of IP67.

The embedded system is ideal for aerospace and defense applications, or for any market that can benefit from the Jetson AGX Xavier's incredible performance in a rugged enclosure.



Specifications	
System Overview	1x Main Compute Unit; 1x Flexible Rear IO Module; 1x Quick Release Docking Sled
Module Compatibility	NVIDIA® Jetson AGX Xavier™ - GPU: 512-core Volta GPU with Tensor Cores - CPU: 8-core ARM v8.2 64-bit CPU, 8MB L2 + 4MB L3 - Memory: 16GB 256-Bit LPDDR4x 137GB/s - DL Accelerator: (2x) NVDLA Engines - Vision Accelerator: 7-way VLIW Vision Processor - Encoder/Decoder: (2x) 4Kp60 HEVC/(2x) 4Kp60
USB	3x USB 3.1 Gen 2 (1x OTG capable)
Ethernet	2x GBE (1000BASE-T)
Video Output	2x HDMI
Serial/UART Communications	1x RS-232; 1x RS-422/485; 1x UART 3.3V TTL (Debug)
CAN	2x CAN 2.0b
GPIO	4x Discrete Inputs 5V TTL; 4x Discrete Outputs 5V TTL; 1x Dedicated Input for ZEROIZE
System Storage	1x 32GB eMMC (on Xavier module); 1x NVMe (External)
Expansion	1x M.2 E-Key (WiFi/BT)
Flexible Rear IO Module	Rugged IP67 Fischer MiniMax Circular Connectors (Optional M12 and 38999 Builds)
Misc/System IO	1x Reset Signal; 1x Force Recovery Signal
RTC	1x RTC Battery
Input Power	+16V to +50V DC Input (28V Nominal) MIL-STD-461F MIL-STD-704 MIL-STD-1275
Mechanical	System Outer Dimensions: IO Panel: 37mm x 140mm x 20mm Main Compute Unit: 127mm x 127mm x 50mm Machined Aluminum Structure with Integrated Fanless Heatsink
IP Rating	IP67
Compliance / Certifications (Pending)	MIL-STD-810G/DO-160G (Thermal, Shock, Vibration, Altitude, Humidity) MIL-STD-461F/DO-160G (EMI/EMC)
Operating Temperature	Full System Range - TBD -25°C to +80°C (Xavier Module Range)
Warranty and Support	1 Year Warranty and Free Technical Support

FEATURES

- ✓ *Wide I/O assortment including 2x GbE, 3x USB 3.1, 2x HDMI, 2x CAN 2.0b, 8x GPIO, 1x RS-232, 1x RS-422/485*
- ✓ *Unique docking station - allows for quick release of Sentry-X compute module*
- ✓ *Ideal for Aerospace and Defense applications*
- ✓ *Designed to MIL-STD-810G, DO160G for shock & vibration, ingress protection of IP67*

