

AVR-X310

Rugged weatherproof X310 SDR



Key Features

- NI X310 SDR
- Supports both TwinRX and UBX160 modules
- 2x 10GbE
- 12-36VDC Input with EMI Pre filter
- MIL-STD-810, MIL-STD-461, MIL-STD-1275 Compliant

Small size weight and power rugged SDR system includes NI X310/TwinRX/UBX modules with rich variety of I/O options.

Extended temperature support and all in a ruggedized small form factor embedded system.

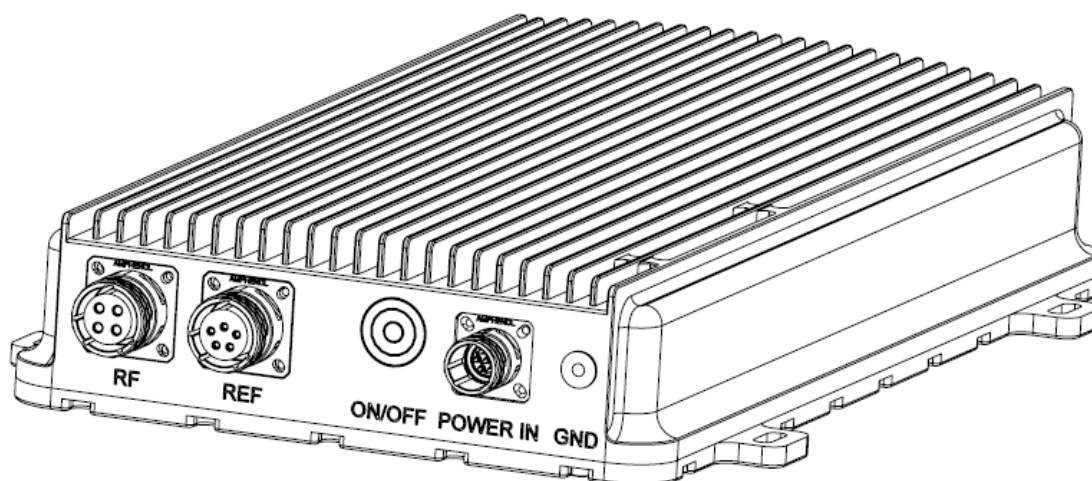
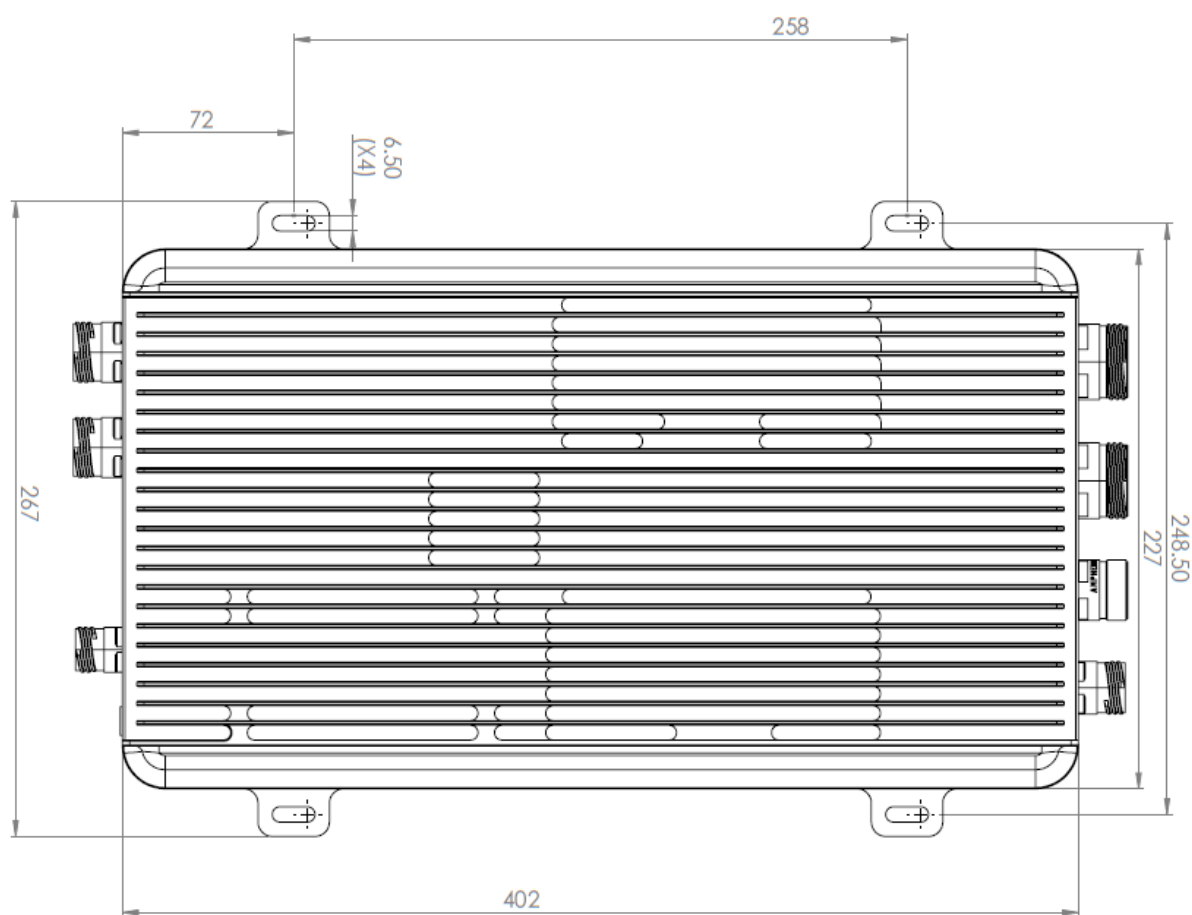
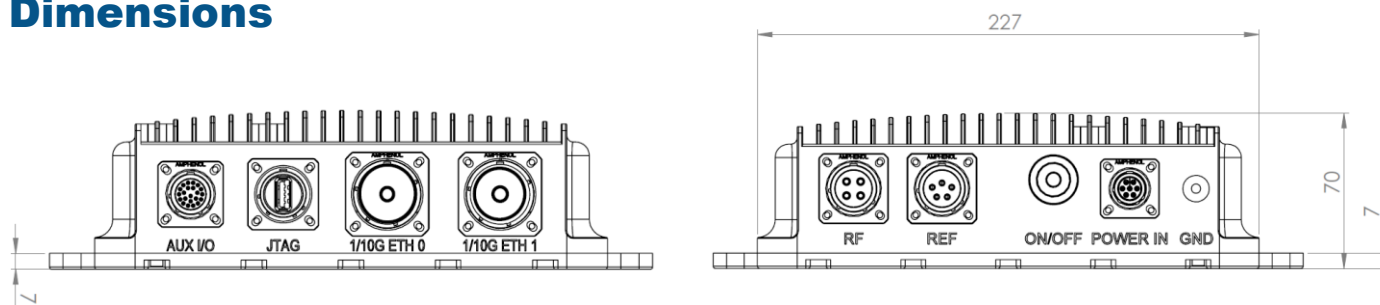
Specification

SDR	Two wideband RF daughterboard slots, Up 120MHz bandwidth per channel Selection covers DC to 6 GHz, Large, customizable Kintex-7 FPGA SRP X310 – XC7K410T, Multiple high-speed interfaces Dual SFP (+) ports for 1/10 Gigabit Flexible clocking architecture, Configurable sample clock Optional GPS-disciplined OCXO, Coherent operation with 10 MHz/1 PPS		
38999 I/O Connectors	2x Ethernet	2x 10GbE Optical	
	1x RF	2x RX, 2x TX, Ref In/out, GPS	
	1x JTAG	USB	
	1x AUX	Digital I/O	
	1x Power In		
Power Supply	12-36VDC Input (with integrated EMI Filters)		
Environment		Operating	Non-operating
	Temperature	-20 ~ 55° C	-30 ~ 85° C
	IP Rating	IP67	
	Environmental	MIL-STD-810	
	EMI/EMC	MIL-STD-461	
Physical Characteristics	Dimensions (W x H x D)	402 x 227 x 77 mm	
	Weight	~5.5Kg	

Ordering Information

AVR-X310-A1	Rugged weatherproof X310 SDR with Dual TwinRX
AVR-X310-A2	Rugged weatherproof X310 SDR with Single TwinRX, Single UBX160
AVR-X310-A3	Rugged weatherproof X310 SDR with Dual UBX160

Dimensions



MIL-STD-461 Compliance

Compliant to MIL-STD-461F as per Table V Ground Army category.

Requirement	CE102	Conducted emissions, power leads, 10 kHz to 10 MHz
	CS101	Conducted susceptibility, power leads, 30 Hz to 150 kHz
	CS114	Conducted susceptibility, bulk cable injection, 10 kHz to 200 MHz, curves 3&4
	CS115	Conducted susceptibility, bulk cable injection, impulse excitation
	CS116	Conducted susceptibility, damped sinusoidal transients, cables and power leads, 10 kHz to 100 MHz
	RE102	Radiated emissions, electric field, 2 MHz to 18 GHz
	RS103	Radiated susceptibility, electric field, 2 MHz to 18 GHz, 50V/m

MIL-STD-810 Compliance

Requirement	Low air pressure	Method 500.5, Procedure II Operation/Air Carriage to 4572m (15.000 ft)
	Low Temperature Operation	Method 502.5, Procedure II -20°C, 4 hours
	High Temperature Operation	Method 501.5, Procedure II +55°C, 4 hours
	Humidity	Method 507.5 85%-95% RH without condensation
	Vibration	Method 514.6, Category 24 5-500Hz, Vertical 7.7Grms, 40mins, 3 axes
	Shock	Method 516.6 20 Grms, 11ms, 3 axes
	Low Temperature Storage	Method 502.5
	High Temperature Storage	Method 501.5, Procedure 1
	Salt Fog	Method 509.7 Salt Spray (50±5) g/L