ATR Chassis, Top Loaded for 3U OpenVPX, Conduction Cooled

ATR112 Chassis

KEY FEATURES

- Rugged MIL 1/2 ATR enclosure for 3U OpenVPX boards (other architectures available upon request)
- Top-loaded, sealed conduction cooled enclosure
- 1/2 ATR: short version to 5 slots, medium to 8 slots, and long to 16 slots
- 3U OpenVPX in various VITA 65 profiles
- Various VITA 62 pluggable PSU options available, AC or DC
- SOSA options available
- Optional custom front panel options with filtering, MIL 38999 connectors, etc.
- Designed to MIL-STD-461 for emissions & susceptibility and MIL-STD-810 for temperature, shock, vibration, humidity, fungus, & salt fog

The ATR112 is a MIL-rugged ATR enclosures designed for MIL specifications for airborne, shipboard, and other hardened applications. The 1/2 ATR top loaded ATR is geared for 3U OpenVPX designs, with other customization options. The chassis is offered in cabled and cable-less versions.

With a modular, top-loaded design, various VITA 65 profiles are available with customizable front panel I/O. Mounting trays and other accessories are also available. Contact Pixus for details.

Pixus Technologies Inc. USA (916) 297-0020 Canada (519) 885-5775
Email: sales@pixustechnologies.com Website: www.pixustechnologies.com

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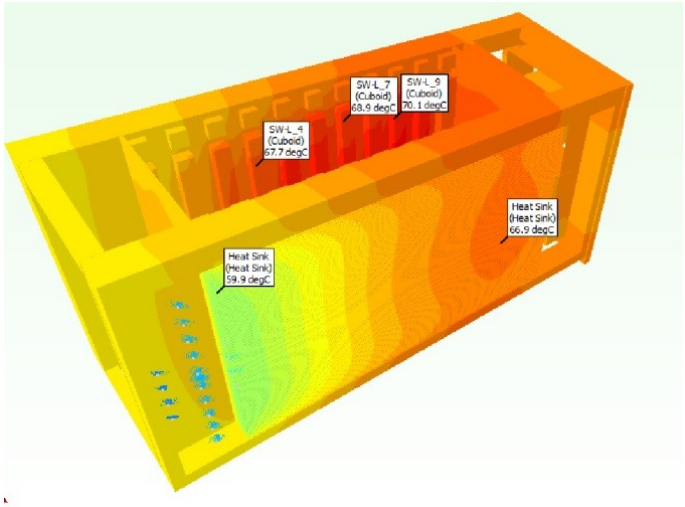
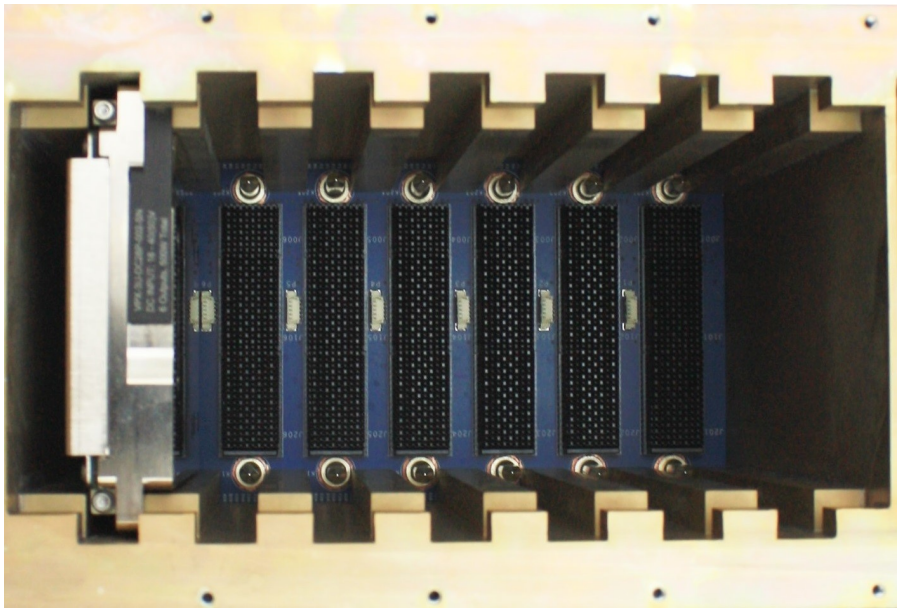
POWER

Pixus works with several PSU vendors for the optical power solution for your application. Typically, VITA 62 PSUs are utilized with 85-264V universal AC and 18-40V DC input options. There are additionally versions for 3-phase AC power. The VITA 62 power supplies are designed for the rigors or airborne and other rugged applications and meet the applicable MIL 704, 810, and 461 standards. Optional 50ms (or other) hold-up time typically achieved with separate plug-in or specialty modules. Contact Pixus for more details for your specific power requirement.

COOLING

Pixus performs preliminary thermal simulations for modified standard designs to meet the requirements of each application. Additional thermal simulation services are available. Pixus will find the optimal cooling approach for your loading configuration.





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SPECIFICATIONS

Architecture		
Physical	Dimensions	Height: ~ 8.63”*
	Pitch	1.0” slot pitch standard
	(from aspect of front of card cage)	Width: 1/2 ATR: ~ 4.88” standard
		Depth: Short: ~ 7.66” Med: ~ 10.68” Long: ~ 21.68”
Type	ATR chassis	*consult Pixus for other options
Standards		
ARINC	Type	ARINC 404, 600 optional
VITA/ANSI	Backplane, Chassis	VITA 65 for OpenVPX, VITA 48.2
MIL-STD	Type	810 (shock, vibration, environmental), 461 (EMI)
Configuration		
Power	Type	28VDC, 48VDC, 90-264VAC input @ 47-880Hz
		Various output options for 3U OpenVPX (3.3V, 5V, +/- 12V, 3.3 AUX, + 12V AUX)
Environmental	Temperature	Operating temperature: -40° to +85°C
		Storage temperature: -55° to +90°C
	Altitude	Application dependent options, consult Pixus for details
	Weight	~ 13 lbs for enclosure and backplane, depending on configuration
Conformal Coating		Upon request (See page 6 selection “J” for available options)
Other		
MTBF	25 degrees GB 82,000 hrs, 65 degrees A/C 27,000 hrs	
Certifications	Designed to meet FCC, CE and UL certifications where applicable	
Standards	ISO9001:2015 and AS9100B standards	
Compliance	Designed to MIL-STD-810, MIL-STD-461	
Warranty	Two years	
Trademarks and logos	The Pixus Logo is a registered trademark of Pixus Technologies Inc. other registered trademarks are the property of their respective owners. Specs. subject to change without notice.	

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ORDERING OPTIONS

ATR112-ABCDD-EFG-J

A = Backplane

1 = 3U OpenVPX
2 = Other

B = Backplane Speed

1 = Up to 5.0 Gbps
2 = 6.25 Gbps
3 = 8 Gbps (PCIe Gen3)
4 = 40GbE
5 = Other

C = Depth

1 = Short ~ 7.66”
2 = Medium ~ 10.68”
3 = Long ~ 21.68”
4 = Other

DD = Payload Slots (Not including PSUs)

Example 0n = n slots
01 = 1 slot
02 = 2 slots
03 = 3 slots
09 = 9 slots

E = PSU Input

1 = 28V DC
2 = 48V DC
3 = 90-230V AC
4 = Other

F = PSU Output

1 = Reserved
2 = Reserved
3 = Reserved
4 = Reserved
5 = 3U OpenVPX voltages, 12V SOSA (+ 12V, 3.3 AUX, VBAT)
6 = 3U OpenVPX voltages (3.3V, 5V, +/- 12V, 3.3 AUX, + 12V AUX)
7 = Other

G = Cooling

1 = Conduction cooled—no fans (standard)
2 = Other

J = Conformal Coating

0 = None
1 = Humiseal 1A33 Polyurethane
2 = Humiseal 1B31 Acrylic