

# 1/2 ATR Chassis, Rear Loaded for 3U OpenVPX, Conduction Cooled



## ATR012 CC



### KEY FEATURES

- Modular Rugged MIL 1/2 ATR enclosure for 3U OpenVPX
- Customizable enclosure based upon proven modular components & techniques
- Front or rear loaded
- Short or Long depths and Short or Tall heights
- 3U backplanes up to 5 slots of OpenVPX or other architectures, SOSA options
- Facilitates VITA 66 (optical) and/or VITA 67 (RF) cabling
- Optional pluggable PSU/VITA 62 slot PSU options to 600W
- 12V, 5V, and 3.3V power outputs standard
- Optional custom front panel options with filtering, MIL 38999 connectors, etc.

The ATR012 is a modular MIL-rugged ATR enclosure, geared for 3U OpenVPX designs. The versatile design allows multiple customizable configuration based on proven components and design techniques. Pixus Technologies leverages over 20 years of superior cooling, mechanical design, and backplane innovation.

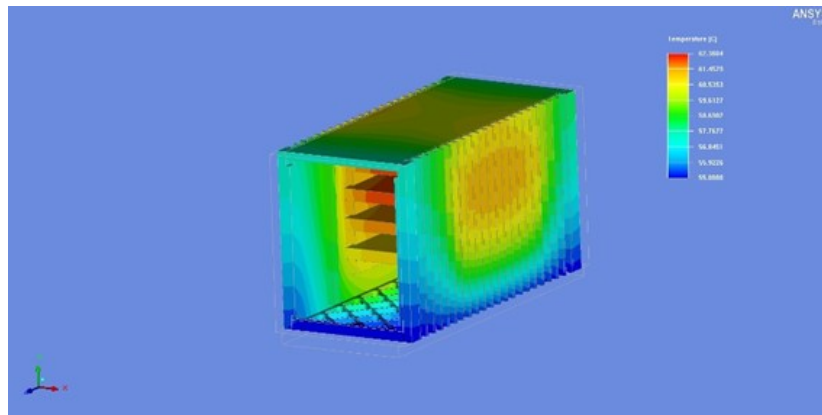
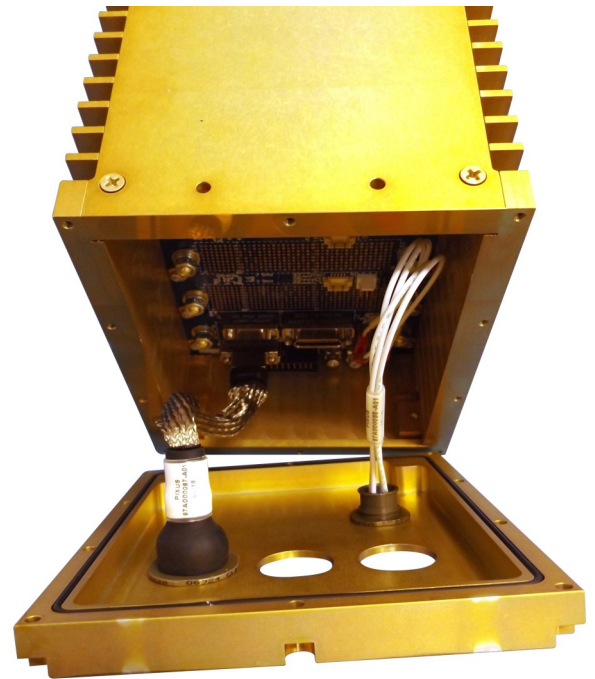
The ATR012 features a rugged, construction with dip brazing. The ATR enclosures are designed to meet MIL-STD-810 for shock and vibration and for MIL-STD-461 for EMI.

The Pixus ATR012 has optional MIL-STD-704F power supplies. The ATR012 can be designed/configured with components suited for altitudes above 30,000 feet.

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3+1 slot, 3U OpenVPX 1/2 ATR, rear loaded example



Specifications of 3 VPX + 1 PSU slot example:

- 6" High x 4.88" width x 10.75" long
- 3-slot OpenVPX backplane, BKP3-CEN03-15.2.9 profile is optional
- 1 VITA 62 PSU (300W-600W, 28VDC input standard), various wattage and inputs optional
- Dip-brazed or screwed versions optional
- Heat dissipation in excess of 175W
- Weight: approx. 20 lbs.

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## SPECIFICATIONS

|                      |   |   |
|----------------------|---|---|
| <b>Architecture</b>  |   |   |
| Physical             | Dimensions  | Height: 152.5 mm to 254 mm (configuration dependent)                          |
|                      | (from aspect of front of card cage)   | Width: ~ 124mm for 1/2 ATR  |
|                      |   | Depth: 248 mm to 352 mm (configuration dependent)                             |
| Type                 | ATR chassis   |   |
| <b>Standards</b>     |   |   |
| ARINC                | Type  | ARINC 404, options for 600  |
| MIL-STD              | Type  | 810 (shock, vibration), 461 (EMI)   |
| VITA                 | Specification   | VITA 48, VITA 65, VITA 66 (optional), VITA 67 (optional)                      |
| <b>Configuration</b> |   |   |
| 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, consult Pixus for details                              |
| Conformal Coating    |   | Upon request (See page 6 selection "J" for available options)                 |
| <b>Other</b>         |   |   |
| MTBF                 | MIL Handbook 217-F@ TBD 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 (original configuration flight tested)   |   |
| 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

## ATR012-ABCDD-EFG-H0J

### A = Depth

T = Long (to 275 mm, standard)  
S = Short (to 248 mm) X = Other

### B = Height

M = Medium (to 178 mm)  
S = Short (to 152.4 mm) T = Tall (to 254 mm)

### C = Backplane

1 = Reserved  
2 = 3U OpenVPX  
3 = Reserved  
4 = Reserved  
5 = Reserved  
6 = Reserved  
7 = 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 = 8-36 (28V nominal) DC  
2 = 48V DC  
3 = 85-264V AC  
4 = Custom  
5 = 3 phase AC (100-125V)  
6 = 220-320V DC (270V nominal)

### 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 = Sealed with heat exchange (customized option)

### H = Backplane Speed

0 = Reserved  
1 = 6.25 GB/s  
2 = 8 GB/s (for PCIe Gen3)  
3 = ~10 GB/s (for 40GbE)  
4 = Other

### J = Conformal Coating

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