# 3/4 ATR, Conduction Cooled





### Preliminary Datasheet







#### ATR034T KEY FEATURES

- Rugged MIL 3/4 ATR enclosure
- Top or front loaded, sealed or heat exchange
- ARINC 404 versions available
- Short or Long depths and Short or Tall heights
- 3U backplanes to 9-slot OpenVPX, CompactPCI, or VME64x. 6U versions to 7slots
- Optional pluggable PSU/VITA 62 slot (s)
- Conduction cooled to 80W/slot with heat exchangers (contact Pixus for higher heat dissipation options)
- PSU options to 450W, fixed or pluggable
- 12V, 5V, and 3.3V power outputs standard
- Optional custom front panel options with filtering, MIL 38999 connectors, etc.

The ATR034T is a MIL-rugged ATR enclosure, with ARINC 404 versions available. Pixus Technologies leverages over 20 years of superior cooling, mechanical design, and backplane innovation.

The ATR034T features a rugged, dip-brazed construction in the 3/4 ATR size and compliant to ARINC 404 and ARINC 600. The conduction-cooled with heat exchangers can dissipate up to 80W/slot (contact Pixus for higher requirements). The ATR enclosures are designed to meet MIL-STD-810G for shock and vibration and MIL-STD- 461F for EMI as well as IEEE 1101.10 specifications.

The Pixus ATR034T has a pluggable conduction-cooled PSU standard and fixed mount power options are also available. The ATR034T can be configured with components suited for altitudes above 30,000 feet.

*Pixus Technologies can modify this product to meet special customer requirements without NRE (minimum order placement is required).* 



#### SPECIFICATIONS

Architecture			
Physical	Dimensions	Height: 195 mm to 270 mm (configuration dependent)	
	(from aspect of front of card cage)	Width: ~ 125mm for 1/2 ATR	
		Depth: 248 mm to 498 mm (configuration dependent)	
Туре	ATR chassis		
Standards			
ARINC	Туре	ARINC Type ARINC 404, 600	
MIL-STD	Туре	810F (shock, vibration to 20G), 461D (EMI)	
Configuration			
Power		28VDC, 48VDC, 90-264VAC input @ 47-880Hz	
		Various output options (3.3V, 5.5V, +/- 12V)	
	Temperature	Operating temperature: -40° to +85°C	
		Storage temperature: -55° to +90°C	
Environmental	Altitude	30,000ft operating	
Conformal Coating		Upon request (See page 6 selection "J" for available options)	
Other			
MTBF	MIL Handbook 217-F@ TBD Hrs.		
Certifications	Designed to meet FCC, CE and UL certifications where applicable		
Standards	ISO9001:2000 and AS9100B:2004 standards		
Compliance	RoHS and NEBS		
Warranty	Two years		
Trademarks and logos	The Pixus Logo is a registered trademark of Pixus Technologies Inc. other registered trade- marks are the property of their respective owners. Specs. subject to change without notice.		



### **Power Supply—Pluggable Version**

Parameter	Rating	Notes
Vin max range	18 to 36 VDC	Baseplate temperature
Temperature	-40 to +85	
Combined output power	550W	
Input power	640W	@ 550W out (28VDC input)
Max +5V power	224W	
Max +3.3V	224W	
Max +12V power	112W	
Max –12V power	112W	

## **Cooling Options**

An optional high performance MIL-grade axial fan is available for hybrid conduction-cooled with supplemental air cooling. Contact Pixus for liquid-cooled options.

## **IO/Cabling Options**

An optional removable front panel offers access to custom IO options. Contact Pixus on details for IO integration. Flexcircuit designs are also optional.

### **Temperature - Operating, Storage**

The operating temperature range is -40 degrees C to +85 degrees C. The storage temperature is -55 degrees C to +90 degrees C.

### Backplane

The 6U or 3U backplane options include OpenVPX, VME64x, CompactPCI, and other Eurocard architectures. Maximum slot width is 7 slots. OpenVPX backplane options include hybrid VME64x/VPX in data rates of 3.125, 5.0, or 6.25 Gbaud/sec. Contact Pixus to discuss OpenVPX profile configurations.



## ORDERING OPTIONS

## ATR034-ABCDD-EFG-OOJ

A = Depth				
T = Long (to 320 mm) S = Short (to 248 mm) X = Extra Long (to 498 mm)				
B = Height				
M = Medium (to 225 mm) S = Short (to 195 mm) T = Tall (to 270 mm)				
C = Backplane				
1 = 3U CompactPCI $5 = 6U$ OpenVPX $2 = 3U$ OpenVPX $6 = 6U$ VME $3 = 3U$ VME $7 = 0$ ther $4 = 6U$ CompactPCI				
DD = Slots				
Example $0n = n$ slots 01 = 1 slot 02 = 2 slots 03 = 3 slots				
E = PSU Input				
1 = 28V DC 2 = 48V DC 3 = 90-230V AC 4 = Custom				
F = PSU Output				
1 = Dual Output, (among 3.3V, 5V, 12V, -12V) to 200W 2 = Dual Output, 200W to 350W 3 = Dual Output, above 350W 4 = Tri Output, (among 3.3V, 5V, 12V, -12V) to 200W 5 = Tri Output, 200W to 350W 6 = Tri Output, above 350W 7 = Other				
G = Cooling 1 = Sealed 2 = Sealed with heat exchange				
J = Conformal Coating				

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