

## FEATURES AND BENEFITS

- Precision-machined construction
- Available in 3U or 6U card formats
- Rugged deployment
- Expansive range of ARINC sizes
- Easily configurable for custom sizes
- Modular power supply with AC or DC filtered inputs
- High altitude fan offering
- System performance monitoring
- Multiple bus architectures
- Cold-start heaters
- Avionics isolation tray
- Configurable I/O pane



# 716 SERIES

## CONDUCTION COOLED ATR ENCLOSURES



The 716 Series Conduction-Cooled ATR Enclosures from Atrenne offer a wide range of COTS solutions utilizing a rugged precision-machined design. Engineered for strength, lightweight, and maximum cooling in a conduction-cooled environment, the 716 Series Enclosures incorporate a specially designed frame and configurable conducting walls that allow the ATR to be tailored to meet a wide range of thermal requirements.

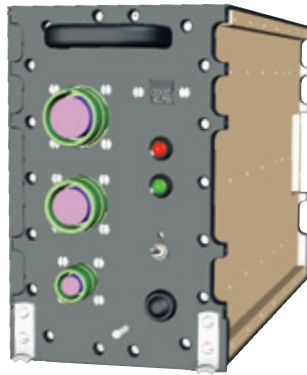
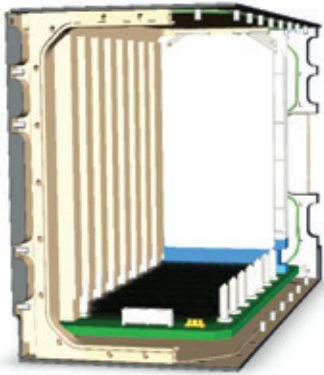
The 716 Series Enclosures are available in standard ARINC sizes that include 1/2 ATR Short to 1-1/2 ATR Long as well as any custom form factor required. All bus structures and platforms from the stability and solid performance of the VPX, VME, VME64x, VXS, and CompactPCI architectures, both in 3U and 6U form factors, work with the 716 Series Enclosures.

The 716 Series Enclosures are part of the ATR product family. Designed as a straight conduction-cooled chassis, the 716 Series Enclosures can be configured as forced air-over conduction, similar to the 717 Series. However, the 716 Series Enclosures offer a lighter-weight option to the dip-brazed 717 Series. As a lightweight alternative, the 716 Series Enclosures meet the stringent weight requirements for airborne applications and maintain flexibility in configuration. Constructed as a frame, the conducting walls can be machined in a variety of patterns, from vertical- and horizontal-finned to an array of geometric patterns that optimize the surface area for maximum heat transfer. These side panels can also be machined to accept a folded fin core used in an air-over conduction arrangement, that when configured with an external fan will maximize the thermal transfer.

The 716 Series Enclosures can be configured with an optional avionics tray for isolation from shock and vibration environments common to airborne, vetronics, and shipboard applications.

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## CONDUCTION COOLED ATR ENCLOSURES



### DIMENSIONS:

ATR Size order number	ATR Size	Aprox. Vol.		Width (W)		Length (L1)		Length (L2)		Height (H)		Max. 6u Slots
		In3	Litre	+/- .03 in	+/- .76mm	+/- .04 in	+/- 1.0mm	inches	mm	inches	mm	
1	1/2 Short	649	10.64	4.88	123.95	12.52	318.0	12.62	320.5	7.62	193.5	5 Slots
	1/2 Long	1012	16.58	4.88	123.95	19.52	495.8	19.62	498.3	7.62	193.5	5 Slots
2	3/4 Short	997	16.34	7.50	190.50	12.52	318.0	12.62	320.5	7.62	193.5	8 Slots
	3/4 Long	1555	25.48	7.50	190.50	19.52	495.8	19.62	498.3	7.62	193.5	8 Slots
3	1 Short	1346	20.06	10.12	257.05	12.52	318.0	12.62	320.5	7.62	193.5	12 Slots
	1 Long	2098	34.38	10.12	257.05	19.52	495.8	19.62	498.3	7.62	193.5	12 Slots
4	1-1/2 Long	3188	52.24	15.38	390.65	19.52	495.8	19.62	498.3	7.62	193.5	18 Slots

### SPECIFICATIONS:

Storage Temp.	-40°C to +85°C	MIL-STD-810F
Operating Temp.	-40°C to +70°C	
EMC	- -	MIL-STD-461D
Input Power	28VDC 115VAC/ 400Hz. 1Ø 115VAC/ 400Hz. 3Ø	MIL-STD-704A Thru 704E MIL-STD-1275A
Wiring	Low Toxicity	MIL-C-24643
IP Rating	- -	IP66
Vibration	15 to 2,000Hz At 0.1g2/ Hz. (RMS~12g)	MIL-STD-810F Method 514.5
Shock	20g for 11ms	MIL-STD-810F Method 516.5

Acceleration	13.5g	MIL-STD-810F Method 513.5
Altitude	50,000 FT	MIL-STD-810F Method 500.4
Humidity	Up to 95% RH	MIL-STD-810F Method 507.4
Salt Fog	5% for 48 Hours	MIL-STD-810F Method 509.4
Fungal Growth	No Growth	MIL-STD-810F Method 508.5
Thermal Shock	Sudden change in temperature of surrounding atmosphere	MIL-STD-810F Method 503.4
Sand & Dust	Sealed from Environment	MIL-STD-810F Method 510.4
Finish	Yellow Chromate Paint	MIL-C-5541 MIL-STD-595

### PART NUMBERING / ORDERING INFORMATION:

716 X | X X X | - X X

**Denotes:**  
Conduction Cooled  
ATR Enclosures

**ATR Size:**  
1 = 1/2 | 2 = 3/4 | 3 = 1  
4 = 1 1/2 | 9 = Custom

#### Denotes: Factory Assigned Number

The modular design of the 716 Series Enclosures provides an expansive range of options and configurations in size, power and I/O that allows for users to meet their requirements without the limitations of selected configurations. Consult the factory or your Atrenne representative to configure your ATR system.

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