

# » FS-5971 «



## **FS-5971 1/2 5-slot ATR Conduction Cooled Chassis**

- » Military 1/2 ATR chassis
- » Houses 5 conduction cooled circuit cards per IEEE 1101.2, 0.8" pitch
- » Conduction cooled via a natural convection
- » 200 W, 28 VDC input, compatible plug-in power supply

# FS-5971 1/2 5-slot ATR Conduction Cooled Chassis

The Kontron FS-5971 is a 5-slot, conduction cooled chassis for military applications. It is capable of maintaining a sealed, dry air environment, while subject to humidity, immersion and exposure to fluids environments. This allows for use in environments with extreme temperatures, shock, and EMI exposure where reliability is important.

## Mounting & Cooling

The base structure of the chassis matches the physical outline limits defined in the ARINC 404A™ specification for a 1/2 ATR, short box. Cooling is achieved utilizing internal conduction to the chassis side plates, whereby the heat is dissipated via natural convection. The FS-5971 provides a secure enclosure for conduction cooled cards over a wide ambient temperature range. The environmental specification defined in the adjacent table indicate the upper temperature limits for a given thermal load.

## Technical Information

### Physical Dimensions

1/2 -short ATR ARINC 404A™ Specifications

Height	7.620"
Depth	13.750"
Width	4.880"
Weight	22lbs (typical—includes enclosure, backplane and power supply)

### Environmental Specs

#### Operating Temperature

Internal thermal load for cards & PSU losses

Power Dissipation WATTS	Max Operating Ambient Temperature	
	71°C Card Edge Temp	85°C Card Edge Temp
50	47°C	61°C
70	39°C	55°C
90	30°C	42°C

Storage Temperature	-57°C to +85°C
EMC	CE101, CE103, CS102, CS106, RE102, RS101, RS102, RS103, MIL-STD-461E
Enclosure	MIL-STD-108E, Watertight at 3 feet for 1 hour
Vibration	MIL-STD-810E, Random 0.1g2/Hz, 15-2000 HZ
Shock	MIL-STD-810E, 20 g, 11 ms, half sine wave
Input Voltage	22 to 29 VDC MIL-STD-1275A, MIL-STD-704 A to F
Power Supply Output	+5V 30 A (max) +12V 1 A (max) -12V .5 A (max) 3.3V 10 A (max)
Front I/O Panel Options	Front panel with connectors for I/O, power, MIL-STD-1553B test and video Elapsed time and fault indicators Easily user-configured with backplane wire-wrap (on VME64X)

Kontron routinely customizes our chassis to meet customer specifications, including: outline and mounting, I/O wiring, I/O panels, custom backplanes, environmental considerations, and power supplies.

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