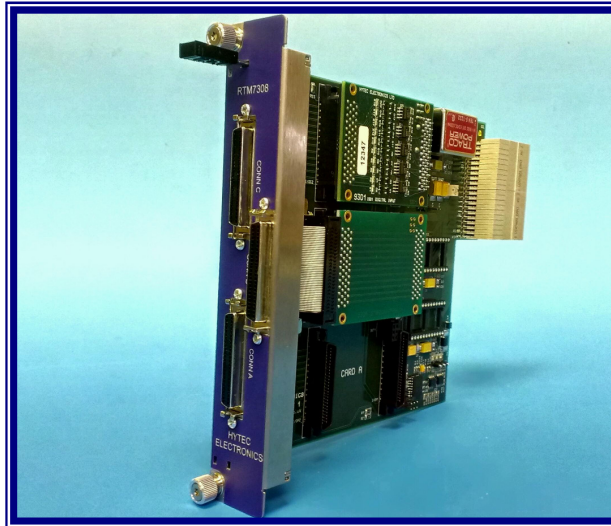


# RTM7308

## Rear Transition Module

### 3 Slot Signal Conditioning RTM For MTCA.4

The RTM7308 is an Rear Transition Module (RTM) that can support up to 3 signal conditioning plug in cards. The RTM7308 is a Double Full-size board MTCA.4 compliant RTM. The RTM is designed to interface with the Hytec AMC7003 3 slot Industry Pack (IP) carrier card to allow signal conditioning to be applied to the IP cards on that carrier.

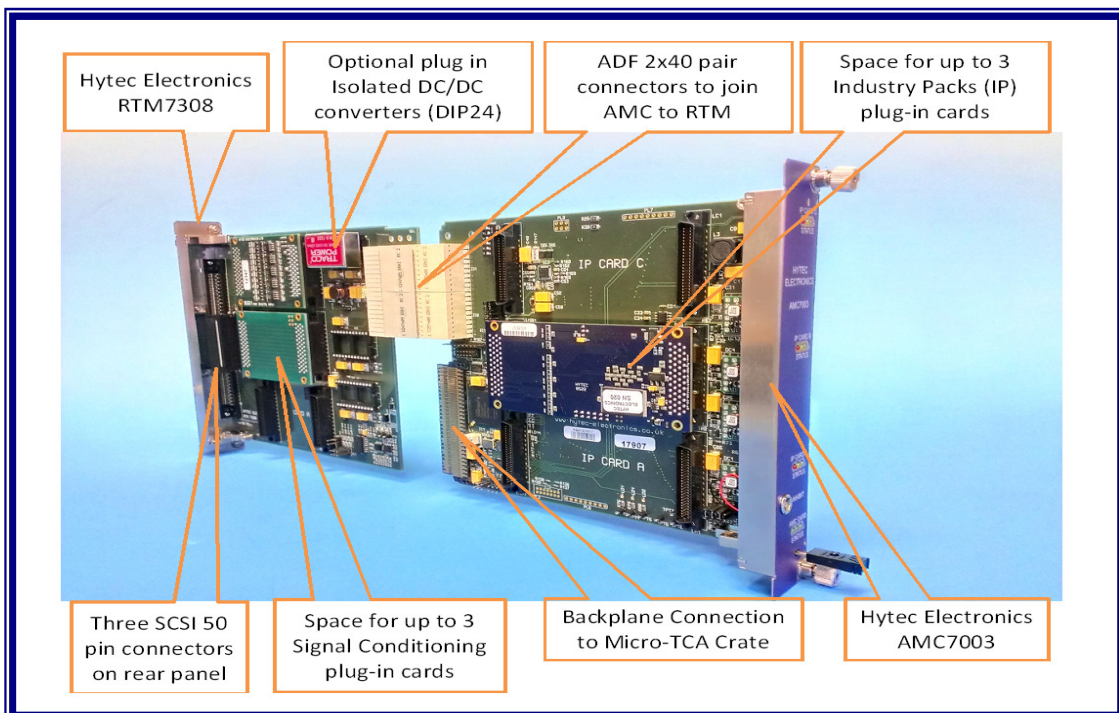


Hytec Electronics also supplies our 9xxx series of plug in signal conditioning cards, for the three slots on the RTM7308.

#### **Additional Information**

When connected to the AMC7003, all 50 signals from each IP card are routed to three independent SCSI connectors on the RTM7308, via the signal conditioning plug in cards.

To be compliant to MTCA.4 there are an I<sup>2</sup>C EEPROM to hold information about the RTM, temperature sensor & I/O Extender to control the panel LEDs and monitor the latch handle. The I<sup>2</sup>C interface is controlled by the AMC7003 card as part of the IPMI Module Management Controller (MMC)



# RTM7308 Key Features/Details

## RTM IPMI Panel Indicators

Blue Hot Swap  
Green Power on OK  
Red Fault/Error

## RTM Connectors

Zone 3 2x 40 pair Advanced Differential Fabric (ADF) connectors to connect to the AMC  
Zone 3 Keying & Alignment, Safety key to indicate to the RTM the voltage levels present  
SCSI-2 50-way Connector 3 independent SCSI-2 50-way connectors for each IP slot on the AMC7003

## Performance

Signal Conditioning sites: Can accommodate up to 3 signal conditioning plug in cards  
Interface MTCA.4 compatible IPMI support.  
Power Supply 3 independent plug in sockets for DC/DC isolated +/-12V supplies for the signal conditioning cards (DIP24 compatible)

## I<sup>2</sup>C Interface Components

- I/O Extender ( I<sup>2</sup>C bus address is 0x3E Hex)**

The PCF8574A I/O expander has the following connections to its ports

Pin	Description	0	1
P0	Hot swap handle	Closed	Open
P1	Blue LED	On	Off
P2	LED1 Red	On	Off
P3	LED2 Green	On	Off
P4	Power Good	Fail	OK

- Temperature Sensor( I<sup>2</sup>C bus address is 0x48 Hex)**

The temperature sensor is an LM75B device

- EEPROM( I<sup>2</sup>C bus address is 0x50 Hex)**

The 24C32 EEPROM hold the Field Replaceable Unit (FRU) records about the RTM7308 module

## Mechanical

Double Full-Size AMC Module  
Board size:180.6mm x 148.5mm

## RTM Connections

The RTM has 3 independent SCSI-2 50-way connectors and allow different Hytec Electronics 9xxx series of signal conditioning cards to be plugged in, dependent upon the type of signal conditioning required. All 50 signals from each IP cards, 150 in total, on the AMC7003 carrier are fed to the RTM7308 3x SCSI connectors on the rear panel. The I/O connections on the RTM 50-way SCSI-2 type connectors are compatible with the range of 89xx DIN-rail mounted I/O termination and breakout assemblies supplied by Hytec Electronics.

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**Hytec Electronics Ltd** has been providing control and data acquisition system solutions for over 30 years. We design and manufacture high specification instrumentation and systems for the most demanding of industrial research environments. We pride ourselves on the level of hardware and software support provided to all our customers, both new and existing, ranging from detailed application consultancy based on the use of the very latest technology, through to maintaining products supplied over 30 years ago.

We design high specification analogue and digital modular instrumentation based on the stringent requirements of CAMAC, VME, PCI, VME64x and more recently AMC with Industry Packs, and implement software solutions ranging from system drivers in all the leading operating systems, to complete high-reliability turnkey system applications. Our expertise covers not only new technology systems, integrating process and management information, but also re-configuring and re-using existing plant, enabling legacy systems to live on with the latest generation hardware and software technology.



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