



HYTEC ELECTRONICS Ltd

HEAD OFFICE: 5 CRADOCK ROAD, READING, BERKS. RG2 0JT, UK
Telephone: +44 (0) 118 9757770 Fax: +44 (0)118 9757566

E-mail: sales@hytec-electronics.co.uk

RIM 1802 16-Channel I/O Rack-mount Plant Interface

USERS MANUAL

Document Nos.: 1802/UTM/G/x/1.1

Date: 26/2/2009

Author: AB



CONTENTS

1. INTRODUCTION	2
2. PRODUCT SPECIFICATIONS	3
3. MODULE DESCRIPTION	3
4. OPERATION.....	3
5. 1802 CONNECTION DIN-RAIL BOARD PIN-OUT.....	3

1.INTRODUCTION



The Hytec RIM 1802 is a rack mounted unit which allows connection to Industry Pack analogue I/O cards mounted on a VME64X carrier board . It connects to the IP cards via an analogue I/O transition board type 8202 or 8210 using a 50-way SCSI cable.

- BNC coaxial connection to plant equipment.
- 50-way SCSI socket connects to transition board
- Supports one IP card on the 8002 Carrier Board
- Indication of +/-12V presence for use with 8912 DC-DC Converters when used with 8210
- Transient voltage protection

2. PRODUCT SPECIFICATIONS

Size: 1U high x 250mm deep rack-mounted module.
SCSI 50-way connector mounted in centre of rear panel.

Operating temp: 0 to 45 deg C ambient

Power Requirements: Optional +/-12V indication of transition board isolated power

Number of channels: 16 plus XClock and XTrigger

Number of signals: I/O 1-16, TRG, CLK, +/-12V, AGnd, plus 4 spare pairs

Connectors: SCSI 50-way socket for connection to transition board
18 off isolated BNC sockets

Transient protection: 26V clamp rising to 40V max @ 10A

3. MODULE DESCRIPTION

The module is primarily intended to allow plant connections to VME64X board I/O using BNC connectors. The signals are routed to a VME64X transition card using a 50-way twisted pair SCSI cable.

The signal pair for I/O1 connect between SK1 signal pin and outer shell. The pair for I/O2 connect between SK2 signal pin and outer shell and so on up to SK16. The XTrigger and XClock are also connected via SK17 and SK18. These are connected to the relevant pin numbers on the SCSI connector.

The LEDs which indicate the presence of +/-12V are over-voltage protected by zener diodes.

4. OPERATION

4.1 Connection to Transition Board

Connect the unit to the SCSI socket on the transition board for the relevant carrier board site (e.g. lowest of the four connectors for an IP card plugged into site A)

4.2 Connection to Plant Equipment

Connect the signals to the terminals as shown in the table in section 5.

5. 1802 Connection DIN-Rail Board Pin-out

SCSI 50-way	Socket	LED	Signal	Comment
-------------	--------	-----	--------	---------



26	SK1 inner		I/O1 Signal	Protected pair
1	SK1 outer		I/O1 Return	
27	SK2 inner		I/O2 Signal	Protected pair
2	SK2 outer		I/O2 Return	
28	SK3 inner		I/O3 Signal	Protected pair
3	SK3 outer		I/O3 Return	
29	SK4 inner		I/O4 Signal	Protected pair
4	SK4 outer		I/O4 Return	
30	SK5 inner		I/O5 Signal	Protected pair
5	SK5 outer		I/O5 Return	
31	SK6 inner		I/O6 Signal	Protected pair
6	SK6 outer		I/O6 Return	
32	SK7 inner		I/O7 Signal	Protected pair
7	SK7 outer		I/O7 Return	
33	SK8 inner		I/O8 Signal	Protected pair
8	SK8 outer		I/O8 Return	
34	SK9 inner		I/O9 Signal	Protected pair
9	SK9 outer		I/O9 Return	
35	SK10 inner		I/O10 Signal	Protected pair
10	SK10 outer		I/O10 Return	
36	SK11 inner		I/O11 Signal	Protected pair
11	SK11 outer		I/O11 Return	
37	SK12 inner		I/O12 Signal	Protected pair
12	SK12 outer		I/O12 Return	
38	SK13 inner		I/O13 Signal	Protected pair
13	SK13 outer		I/O13 Return	
39	SK14 inner		I/O14 Signal	Protected pair
14	SK14 outer		I/O14 Return	
40	SK15 inner		I/O15 Signal	Protected pair
15	SK15 outer		I/O15 Return	
41	SK16 inner		I/O16 Signal	Protected pair
16	SK16 outer		I/O16 Return	
42	TB1			
17	TB2			
43	SK17 inner		XTRIG Signal	Protected pair
18	SK17 outer		XTRIG Return	
44	TB3			
19	TB4			
45	SK18 inner		XCLK Signal	Protected pair
20	SK18 outer		XCLK Return	
46	TB5			
21	TB6			
47	TB7	LED1	+12V	+/-12V present
22	TB8		AGnd	only if 8912
48	TB9			installed on
23	TB10		AGnd	transition board
49	TB11	LED2	-12V	8210
24	TB12			
50	TB13		AGnd	
25	TB14		AGnd	