ETL Systems
Excelling in RF Engineering

32 x RF Detection Shelf
for Matrix Systems

Typical applications:
- High density RF detection chassis where rack space is limited.
- Can be used as part of an RF Matrix system in expanding satellite teleports.

-10 to -60 dBm RF detection range

Compact 32 x 2-way RF detection modules housed in a 3U high , 19" rack mountable chassis

Resilience from hot swap RF detection modules, hot swap dual redundant power supplies and a hot swap CPU

Local monitoring via status LEDs on individual modules

850 - 2150 MHz operating frequency range.

Remote control & monitoring via RS232 serial & RJ45 Ethernet port with SNMP & web browser interface

Dry contact alarm port & serial communications for amplifier & power supply status

Technical specifications and operating parameters

RF Parameters

RF Parameters				
22302 Module slots used	Each RF detection module takes 1 slot. 32 slots available in chassis.			
Capacity	RF detect with RF loop through			
Frequency Range	850-2150 MHz (L-band)			
Insertion Loss	2 dB ±1 dB			
RF Connectors	50Ω SMA	50Ω BNC	75Ω BNC	75Ω F-type

		50Ω SMA	50Ω BNC	75Ω BNC	75Ω F-type
Flatness	850-2150MHz	±1.0 dB	±1.0 dB	±1.0 dB	±1.0 dB
	Any 80MHz	±0.4 dB	±0.4 dB	±0.4 dB	±0.4 dB
Input Return Loss	Typical	16 dB	14 dB	12 dB	10 dB
	Minimum	10 dB	10 dB	8 dB	8 dB
Output Return Loss	Typical	16 dB	14 dB	12 dB	10 dB
	Minimum	10 dB	10 dB	8 dB	8 dB
Isolation	Card to Card	>60 dB, 80 dB typical			
Input RF Power		+16 dBm Absolute maximum			

Note 1: The specification is subject to regular reviews and will be updated from time to time as part of our continuing product development and improved spec accuracy.

Note 2: Operation beyond the quoted limits stated above may cause instantaneous and permanent damage.

Environmental

Environmental	
Operating temperature	0 to 45˚C
Location	Indoor use only
Storage temperature	-20˚C to +75˚C
Humidity	20 to 90% non-condensing

Power

Power		
PSU Power	85-264Vac 50-60Hz	Fused 2A, Dual IEC
Power Consumption	<30 W	Fully populated with DET10 cards
LNB Power	None	
PSU	Dual redundant	Diode OR
Hot-swap PSU	Yes	
RF Monitoring	None	

System Control

System Control		
Local Control	Via Front Panel LCD and push buttons	
Remote Control	Via RS232 serial port & RJ45 Ethernet port 10/100 Base T. TCP/IP, SNMP & Web browser interface.	
Alarms	LED via CPU in chassis	Also amplifier status monitoring via HMI when used in a matrix switch system.

Physical

Physical	
Dimensions	3U high x 250mm deep x 19" wide
Weight	<12 kg
Colour	RAL9003-White (semi-matte)

RoHS COMPLIANT

Pb Pb-Free

ISO 9001 certified

IMS INTERNATIONAL

UKAS QUALITY MANAGEMENT
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