



The matrix distributes 32 L-Band signals to 2 analyser in the frequency range 950...2150 MHz without any blocking.
The measurement application requires very high isolation values of the matrix.

Design

The matrix is housed in a 19" subrack with very good RF shielding and consists of the following sub-assemblies:

- low noise amplifiers with high dynamic range
- power dividers 2-way
- solid-state switches SPDT, SP1 6T
- processor board
- LAN and serial interface
- voltage monitoring board
- manual control module
- redundant power supply units

All the necessary signal, power supply and earthing connections are provided at the rear.

The mains switches are located on the front panel.

Control

The matrix is controlled via a LAN and a serial interface.

Special features

The I/O boards are monitored in a processor routine. A status string can also be requested at any time via the control interface.

The power supply voltages and the I/O boards are monitored in a processor routine.

The unit is constructed using a modular approach utilising 19" plug-in sub-assemblies which enable ease of installation and maintenance.

Technical data	measured at 25° C
Model number:	MAS2291
Item number:	1400127
Configuration:	32 inputs, 2 outputs non-blocking
RF specifications	
Impedance (Ohm):	50
Frequency range (MHz):	950...2150
Gain (dB):	1+/-1.5
Gain flatness (dB):	+/-2.5 max.
Noise figure (dB):	15.0 max.
VSWR:	1.8 : 1 max.
Intercept point (dBm):	
3rd order	+10 min.
2nd order	+20 min.
Isolation (dB):	
Out/out	70 min.
On/off	70 min.
Crosstalk	70 min.
P1 dBc (dBm):	0 min.
Switching elements:	solid-state switches non-switched in-/output internally terminated
Further specifications	
Control:	LAN and serial
Manual control:	LCD (4x20) & pushbuttons (3x6)
RF connectors:	SMA female, 50 Ohm
Power supply (Vac, Hz):	100...240, 48...62, redundant
Connector	3-pin, with mains filter & fuses
Mains switches:	with integrated lamp
Temperature range (°C):	
Operating	15...25
EMC:	in accordance to Eur. standard EN 61000-6-1 & EN 61000-6-3
Dimensions:	
Height (RU)	6
Width (inch)	19
Depth (mm)	about 480 (without connectors & handles)
Front panel:	
Front view	painted (RAL7032)