



This matrix distributes 32 IF signals to 32 receivers in the frequency range 20 ... 200 MHz without any blocking.

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 4-way
- solid-state switch boards 32x4
- processor board
- LAN interface
- 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 interface. A manual control module with LC display and pushbuttons could be integrated on the front panel.

Special features

The power supply voltages and the I/O boards are monitored in a processor routine. The selected crosspoints as well as the I/O fault messages are displayed on the manual control module. A status string can also be requested at any time via the control interface. The unit is constructed using a modular approach utilising 19" plug-in sub-assemblies which enable ease of installation and maintenance.

Technical data		measured a 25° C
Model number:	MAS2053	
Item number:	1400301	
Configuration:	32 inputs, 32 outputs non-blocking	
RF specifications		
Impedance (Ohm):	50	
Frequency range (MHz):	20...200	
Gain (dB):	0 +/-1.0	
Gain flatness (dB):	+/-1.0 max.	
Noise figure (dB):	18.0 max.	
VSWR:	1.3 : 1 max.	
Intercept point (dBm):	3rd order +10 min.	
Isolation (dB):	Out/out 45 min. Crosstalk 55 min.	
Input level (dBm):	-10 max.	
Switching elements:	solid-state switches	
Inputs:	non-switched inputs internal terminated	
Further specifications		
Control:	LAN and serial	
Manual control:	LCD (4x20) & pushbuttons (3x6)	
RF connectors:	BNC female	
Power supply (Vac, Hz):	115/230, 47...63, redundant	
Connector	3-pin, with mains filter & fuses with integrated lamp	
Mains switches:		
Temperature range (°C):	Operating 0...40	
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)	

