



# IF 64x64 MATRIX NON-BLOCKING MAS2050



The matrix distributes 64 IF signals to 64 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 32-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. Other interfaces are possible on request.

## 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 at 25° C
Model number:	MAS2050
Item number:	1400008
Configuration:	64 inputs, 64 outputs non-blocking
RF specifications	
Impedance (Ohm):	50/75
Frequency range (MHz):	20...200
Gain (dB):	0 +/-2.0
Gain flatness (dB):	+/-1.0 max., +/-0.5 typ.
Noise figure (dB):	18.0 max.
VSWR:	1.5 : 1 max.
Intercept point (dBm):	
3rd order	+10 min.
2nd order	+20 min.
Isolation (dB):	
Out/out	45 min.
On/off	70 min.
Crosstalk	55 min.
Input level (dBm):	-10 max.
Switching elements:	solid-state switches
Inputs:	non-switched inputs internal terminated
Further specifications	
Control:	LAN
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...50
EMC:	in accordance to Eur. standard EN 61000-6-1 & EN 61000-6-3
Dimensions:	
Height (RU)	12
Width (inch)	19
Depth (mm)	about 480 (without connectors & handles)
Front panel:	
Front view	painted (RAL7032)

Designed & produced by NOVOTORNIK GmbH

