

# L-Band 16x16 MATRIX NON-BLOCKING MAS5160

The matrix distributes 16 L-Band signals to 16 receivers in the frequency range 950...2150 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
- I/O boards (in- and output)
- matrix boards 8x8
- processor board
- LAN and serial interface
- manual control module (optional)
- redundant power supply units (optional)
- DC bias for LNB (optional)

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.

A manual control module with LC display and pushbuttons could be integrated on the front panel.

## Special features

In order to improve operational safety the unit can be equipped with redundant power supply units and a manual control module.

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:	MAS5160
Item number:	(will be assigned after order)
Configuration:	16 inputs, 16 outputs non-blocking
<b>RF specifications</b>	
Impedance (Ohm):	50/75
Frequency range (MHz):	950...2150
Gain (dB):	1+/-1.0 max.
Gain flatness (dB):	+/-1.5 typ.
Noise figure (dB):	13.0 max.
Intercept point (dBm):	
3rd order	+8 min.
2nd order	+20 min.
P 1 dBc (dBm):	-7
VSWR:	1.8 : 1 max.
Isolation (dB):	
Out/out	40 min.
On/off	45 min., 50 typ.
Crosstalk	45 min., 50 typ. (worst case)
Switching elements:	solid-state switches
<b>Further specifications</b>	
Control:	LAN and serial
Manual control:	LCD (4x20) & pushbuttons (3x6)
RF connectors:	F female/SMA female
Power supply (Vac, Hz):	115/230, 50/60
Connector	3-pin, with mains filter & fuses
Mains switches:	with integrated lamp
Temperature range (°C):	
Operating	15...25, forced air cooling recommended
EMC:	in accordance to Eur. standard EN 61000-6-1 & EN 61000-6-3
Dimensions:	
Height (RU)	3
Width (inch)	19
Depth (mm)	about 480 (without connectors & handles)
Front panel:	
Front view	painted (RAL7032)

Designed & produced by NOVOTORNİK GmbH

