

L-Band 64x8 MATRIX NON-BLOCKING MAS2541



The matrix distributes 64 L-Band signals to 8 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
- power dividers 4-way
- solid-state matrix boards 32x2
- processor board
- RS-422 interface
- manual control module
- redundant power supply units
- DC bias for LNB

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 RS-422 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 a 25° C
Model number:	MAS2541
Item number:	1400063
Configuration:	64 inputs, 8 outputs non-blocking

RF specifications	
Impedance (Ohm):	75
Frequency range (MHz):	950...2150 min.
Gain (dB):	1 +/-1.5
Gain flatness (dB):	+/-2.5 max.
Noise figure (dB):	18.0 max.
VSWR:	1.8 : 1 max.
Intercept point (dBm):	
3rd order	+10 min.
2nd order	+30 min.
Isolation (dB):	
Out/out	40 min., 45 typ.
On/off	45 min., 50 typ.
Crosstalk	40 min., 45 typ.
P1 dBc (dBm):	0
Switching elements:	solid-state switches

Further specifications	
Control:	RS-422
Manual control:	LCD (4x20) & pushbuttons (3x6)
RF connectors:	F female, 75 Ohm
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 (forced air cooling)
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)

Designed & produced by NOVOTORNIK GmbH

