



This matrix distributes 8 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:

- amplifiers with high dynamic range
- matrix boards 8x8
- processor board
- LAN interface
- manual control
- redundant power supply
- DC bias for LNB

All the necessary signal and power supply connections as well as the mains switches are provided at the rear.

### Control

The matrix is controlled via a LAN interface. The integrated webserver allows the unit configuration, shows status information and obtain trouble shooting information. Crosspoint settings will be possible also.

### Special features

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

Technical data	
measured a 25° C	
<b>Model number:</b>	MAS4478
<b>Item number:</b>	(will be assigned after order)
<b>Configuration:</b>	8 inputs, 8 outputs non-blocking
RF specifications	
<b>Impedance (Ohm):</b>	75
<b>Frequency range (MHz):</b>	950...2150
<b>Gain (dB):</b>	1 +/-1.0
<b>Gain flatness (dB):</b>	+/-1.5 typ.
<b>Noise figure (dB):</b>	13.0 max.
<b>VSWR:</b>	1.8 : 1 max.
<b>Intercept point (dBm):</b>	
3rd order	+8 min.
2nd order	+20 min.
<b>Isolation (dB):</b>	
Out/out	40 min.
On/off	45 min. (50 typ.)
Crosstalk	45 min. (50 typ.), worst case
<b>P1 dBc (dBm):</b>	-7
<b>Switching elements:</b>	solid-state
Further specifications	
<b>Control:</b>	LAN
<b>Manual control:</b>	LCD & cursor pushbuttons
<b>RF connectors:</b>	F or BNC female
<b>Power supply (Vac, Hz):</b>	80...264, 47...63, redundant
Connector	3-pin, with mains filter & fuses
<b>Mains switches:</b>	integrated in the power supplies
<b>DC bias (V/kHz):</b>	14,18/22 each, 300 mA max.
<b>Temperature range (°C):</b>	
Operating	0...50
<b>EMC:</b>	in accordance to Eur. standard EN 61000-6-1 & EN 61000-6-3
<b>Dimensions:</b>	
Height (RU)	1
Width (inch)	19
Depth (mm)	about 380 (without connectors & handles)
<b>Front panel:</b>	
Front view	painted (RAL7021)