

Full Fan-Out Matrix Switch – MAR1280 HF (1.5 – 30 MHz)



TECHNICAL DATA @ 25°C

Part No.	1400132
Number of inputs	8
Number of outputs	16
Architecture	Non-blocking, full-fan out Switching: small signal relays
Frequency range	1.5 – 30 MHz
Gain [dB]	0 ± 1
Flatness [dB]	± 0.5 typ., ± 0.8 dB max. (full band)
Noise Figure [dB]	8 dB typ., 10 dB max.
OPIP3 [dBm]	+27 dBm min., +31 dBm typ.
OPIP2 [dBm]	+70 dBm min., +75 dBm typ.
Isolation [dB]	
out/out	40 dB min.
...on/off	75 dB min., 80 dB typ.
Crosstalk [dB]	70 dB min., 80 dB typ.
VSWR	
Input	1.3:1 typ., 1.5:1 max.
Output	1.2:1 typ., 1.4:1 max.
Output pwr [dBm] @ 1dB compr.	+5 min., +12 typ.
Input pwr [dBm] non destructive	+15 CW max.
Relay	
Life (per position)	2 million cycles
Impedance [Ω]	50

Connectors	
Input	BNC female
Output	BNC female
Local control	LC display and keyboard, front panel
Remote control	RJ45 Ethernet port 10/100 Base T. TCP/IP & UDP, GUI (browser interface)
Power supply	115/230 V AC (50-400 Hz)
AC consumption	100VA max.
Temperature range	Indoor use only
Operating	0 ... +40°C
Storage	-10 ... +60°C
Colour:	Front panel: RAL7032
Attached hardware	Power cord Operating manual
Dimensions (wxhxd)	483mm x 266mm x 415mm (19" drawer, 6U)
Weight [kg]	13

Features:

- Non-switched in- and outputs internally loaded
- Ins/outs equipped with DC-blocking capacitors
- Permanent monitoring of internal temperature, operating voltages, modules and switch positions



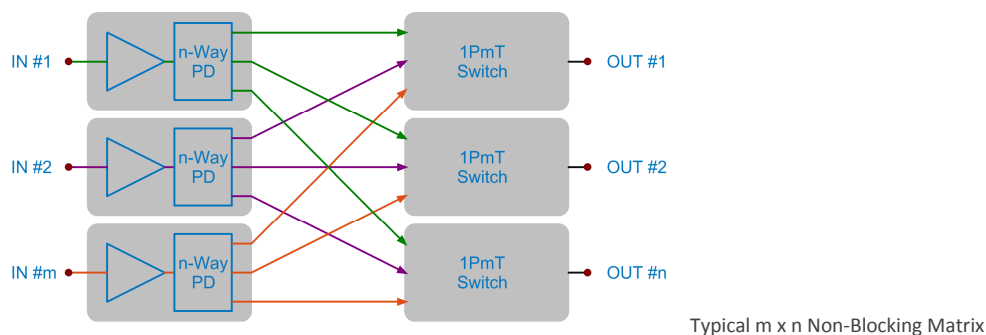
OPTIONS

The following options are available:

- EMP lightning protector and limiter (Independent device)
- SNMP (protocol version 1)

DESCRIPTION

The MAR1280 is configured as a full fan-out non-blocking switch matrix. Each input is split to all output switches. This allows to select the input signal to be seen on each output. The obvious upside is its great switching flexibility.



The MAR1280 performs from 1.5 to 30 MHz. The matrix has low noise figure and high second and third order intercept points. This ensures a high system sensitivity and improves the reception of low amplitude signals. High isolation between outputs minimises undesirable interaction between the receivers connected to the matrix.

The matrix supports remote control. Routings can be monitored and changed, the status of different parameters can be requested.

APPLICATIONS

- HF communications
- Antenna switching
- Radio Monitoring Systems
- EW

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