

# Full Fan-Out Matrix Switch – MAR4511

## UHF / L-, S-, C-, X-, Ku-Band (0.5 – 18 GHz)



### TECHNICAL DATA @ 25°C

<b>Part No.</b>	<b>1400359</b>
Number of inputs	4
Number of outputs	4
Architecture	Non-blocking, full-fan out Switching: coaxial relays
Frequency range	0.5 – 18 GHz
Gain [dB]	3 dB min., 6 dB typ.
Flatness [dB]	± 1.7 typ., ± 3.0 dB max. (full band)
Noise Figure [dB]	10 dB max.
OPIP3 [dBm]	+10 dBm min.
Isolation [dB]	
out/out	15 dB min., 18 dB typ.
...out/in	50 dB min., 60 dB typ.
VSWR	
Input	1.8:1 typ., 2.0:1 max.
Output	1.8:1 typ., 2.0:1 max.
Output pwr [dBm] @ 1dB compr.	0 dBm min., +2 dBm typ.
Input pwr [dBm] non destructive	+6 dBm CW max.
Relay Life (per position)	2 million cycles min.
Impedance [Ω]	50
Connectors	
Input	SMA female
Output	SMA female

Local control	LC display and keyboard, front panel
Remote control	RJ45 Ethernet port 10/100 Base T. TCP/IP & UDP, GUI (browser interface) RS-232/422/485 interface (selectable)
Power supply	115/230 V AC (50/60 Hz)
AC consumption	80VA max. (per phase)
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 133mm x 480mm (19" drawer, 3U)
Weight [kg]	9

#### Features:

- Redundant power supply
- Permanent monitoring of internal temperature, operating voltages, modules and switch positions



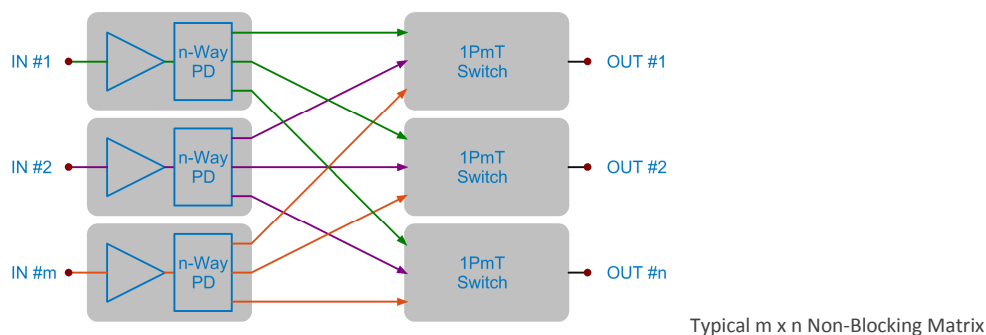
## OPTIONS

The following options are available:

- Single power supply
- SNMP (protocol version 1)
- Switching cycle counter for life time management

## DESCRIPTION

The MAR4511 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 MAR4511 operates over a wide frequency band from 0.5GHz to 18 GHz and is perfectly suitable for a wide variety of RF applications.

The system supports come with serial and Ethernet control interfaces, allowing setup flexibility and easy remote test management.

## APPLICATIONS

- Microwave signals: Communications downlinks
- Test laboratories
- Development centers
- ATE stations

## ABOUT US

**novotronic** is a Germany-based electronics engineering company. **novotronic** specialises in meeting the needs of government and defence, telecommunication, broadcast and aerospace. We have about 25 years experience producing state of the art technology for your applications.

## OUR SKILLS

**novotronic** develops and manufactures technically sophisticated products. As a **certified aerospace and defence company novotronic** operates a quality management system in accordance with ISO 9001:2015 and EN 9100:2018 (equivalent to AS 9100D and JISQ 9100:2016 including ISO 9001:2015).