

Full Fan-Out Matrix Switch – MAR2810

VLF / LF / MF / HF (0.01 – 30 MHz)



TECHNICAL DATA @ 25°C

Part No.	1400312
Number of inputs	4
Number of outputs	8
Architecture	Non-blocking, full-fan out Switching: small signal relays
Frequency range	0.01 – 30 MHz
Gain [dB]	1 ± 1
Flatness [dB]	± 0.5 typ., ± 1 dB max. (full band)
Noise Figure [dB]	7 dB typ., 8 dB max.
OPIP3 [dBm]	+30 dBm min., +32 dBm typ.
OPIP2 [dBm]	+60 dBm min., +75 dBm typ.
Isolation [dB]	
out/out	25 dB min., 28 dB typ.
...on/off	70 dB min., 80 dB typ.
VSWR	
Input	1.4:1 typ., 1.5:1 max.
Output	1.2:1 typ., 1.5:1 max.
Output pwr [dBm] @ 1dB compr.	+10 min., +12 typ.
Input pwr [dBm] non destructive	+15 CW max.
Relay	
Life (per position)	2 million cycles
Impedance [Ω]	50

Connectors	
Input	N female
Output	BNC female
Local control	---
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	35VA max.
Temperature range	Indoor use only
Operating	0 ... +40°C
Storage	-10 ... +60°C
Colour:	Front panel: RAL7021
Attached hardware	Power cord Operating manual
Dimensions (wxhxd)	483mm x 133mm x 480mm (19" drawer, 3U)
Weight [kg]	8

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

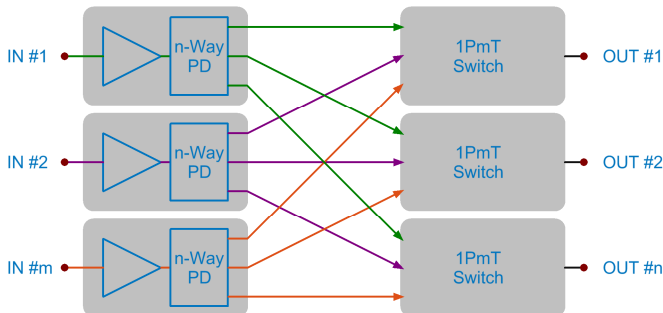
The following options are available:



- EMP lightning protector (@ input)
- RF limiter 1 – 30 MHz (@ input)
- Redundant power supply
- Local monitoring and control via LC display and keyboard at front panel
- SNMP (protocol version 1)

DESCRIPTION

The MAR2810 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.



Typical m x n Non-Blocking Matrix

The MAR2810 performs from 10kHz 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

- Low frequency communication
- HF communications
- Antenna switching
- Wideband Radio Monitoring Systems
- EW

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).

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Management System
ISO 9001:2015
EN 9100:2018
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