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.

**TECHNICAL DATA**

- **Type 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
  - Flatness (dB): ±0.5 typ., ±1 dB max. (full band)
  - Noise Figure (dB): 7 dB typ., 8 dB max.
  - OIP3 (dBm): +30 dBm min., +32 dBm typ.
  - OIP2 (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.
  - Life (per position): 2 million cycles
  - Relay Impedance (Ω): 50
  - Connectors:
    - Input: N female
    - Output: BNC female
  - 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:
    - Operating: 0 ... +40°C
    - Storage: -10 ... +60°C

**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**

- EMP lightning protector (@ input)
- RF limiter 1 – 30 MHz (@ input)
- Redundant power supply

**DESCRIPTION**

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**

- HF communications
- Low frequency communication
- Antenna switching