# Full Fan-Out Matrix Switch– MAR4660

## Ultra-broadband (20 – 6000 MHz)

### TECHNICAL DATA @ 25°C

| Part No. | 1400352 |
|---|---|
| Number of inputs | 2 |
| Number of outputs | 10 |
| Architecture | Non-blocking, full-fan out<br>Switching: coaxial relays, latching, indicator |
| Frequency range | 20 – 6000 MHz |
| Gain [dB] | @ 20 MHz: 8 dB typ<br>@ 2000 MHz: 4 dB typ<br>@ 6000 MHz: 0 dB typ |
| Noise Figure [dB] | @ 20 MHz: 6 dB max<br>@ 2000 MHz: 8 dB max<br>@ 6000 MHz: 12 dB max |
| OPIP3 [dBm] | @ 20 MHz: +4 dBm min<br>@ 2000 MHz: +4 dBm min<br>@ 6000 MHz: +1 dBm min |
| Isolation [dB]<br>out/out | <br>@ 20 MHz: 30 dB min<br>@ 2000 MHz: 25 dB min<br>@ 6000 MHz: 25 dB min |
| VSWR<br>Input<br>Output | <br>1.8:1 typ, 2.0:1 max<br>1.8:1 typ, 2.0:1 max |
| Input pwr [dBm]<br>@ 1dB compr. | <br>@ 20 MHz: -15 dBm min<br>@ 2000 MHz: -10 dBm min<br>@ 6000 MHz: -4 dBm min |
| Relay<br>Life | <br>2.5 million cycles |

| | |
|---|---|
| Impedance [Ω] | 50 |
| Connectors<br>Input<br>Output | <br>N female<br>N female |
| Local control | LC display and keyboard, front panel |
| Remote control | RJ45 Ethernet port<br>10/100 Base T.<br>TCP/IP & UDP,<br>GUI (browser interface)<br>RS-232/422/485 interface (selectable) |
| Power supply | 115/230 V AC (50/60 Hz) |
| AC consumption | 40VA max. |
| Temperature range<br>Operating<br>Storage | Indoor use only<br>0 … +40°C<br>-10 … +60°C |
| Colour: | Front panel: RAL7032 |
| Attached hardware | Power cord<br>Operating manual |
| Dimensions (wxhxd) | 483mm x 133mm x 480mm (19” drawer, 3U) |
| Weight [kg] | 9 |

Features

- Equalizer at each output
- Permanent monitoring of internal temperature, operating voltages, modules and switch positions

Ersteller: MG / Freigabe: MG
AF31 / Ausgabe 21OKT2018

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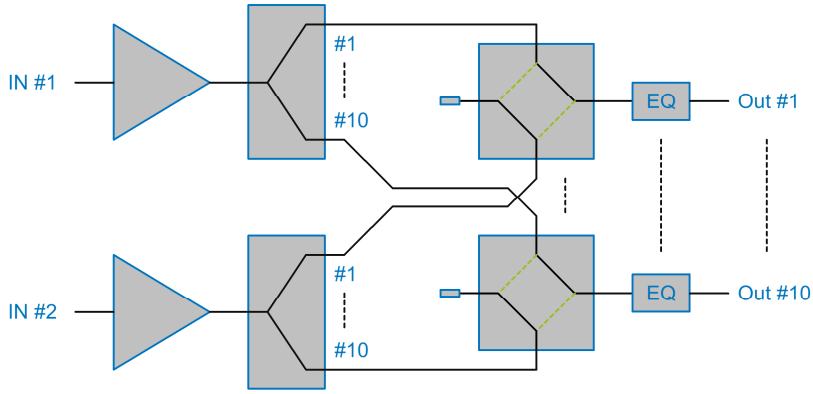
## OPTIONS

The following options are available:

- Redundant power supply
- SNMP (protocol version 1)
- Relay switching cycle counter for life time management

## DESCRIPTION

**novotronik** offers a system which performs from 20 to 6000 MHz. It is configured as a full fan-out non-blocking switch matrix, allowing any output to select any input. At any time either input #1 or input #2 is connected to an output. Interaction between receivers connected to MAR4660 is minimized due to high isolation between outputs.




The MAR4660 supports local and remote control. Routings can be monitored and changed, the status of a lot of parameters can be verified. All inputs and outputs are provided at the rear of the rack utilising N-Type connectors.

## APPLICATIONS

The MAR4660 is designed for a long-term installation at fixed-site radio stations. It is suitable for the following purposes:

- Antenna switching in wideband receiver systems
- Wideband Radio Monitoring Systems
- ITU Radio Monitoring Systems
- RF Switching Systems

## ABOUT US

**novotronik** is a Germany-based electronics engineering company. **novotronik** 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

**novotronik** develops and manufactures technically sophisticated products. As a **certified aerospace and defence company novotronik** 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).