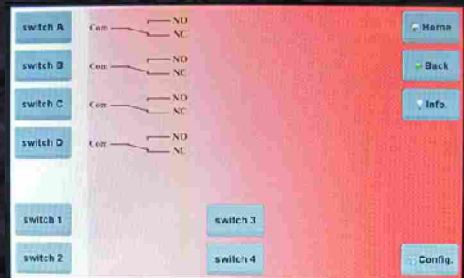


RadiSwitch®



Dijkstra Advice, Research & EMC Instruments B.V.
Vijzelmolenlaan 7 – NL-3447 GX Woerden
The Netherlands
Tel: +31 348 41 65 92
Fax: +31 348 43 06 45
Internet: www.dare.eu
E-mail: instruments@dare.eu

The Standard in EMC Instruments & Software,
Consultancy and Training.

DARE!!
Instruments

The Maximum Flexibility in EMC Test Systems

Flexible • Versatile • Extensible

EMC test systems are complex installations with many test and measurement instruments connected. In order to enable full automated testing, these devices and measuring instruments as well as the connections made between amplifiers, power meters, antennae and EMI receivers should be controlled in an automated manner. To enable switching these signals DARE!! Instruments developed the RadiSwitch® plug-in cards that can be used with the RadiCentre® modular multifunctional EMC test system.

Flexible

The RadiSwitch® RF coaxial relay plug-in cards are able to switch RF signals from DC till 40 GHz and with powers up to 700 Watts directly, or any RF power indirect using externally controlled switches. RadiSwitch® plug-in cards are available in several versions, with one, two or four SPDT coaxial relays or SP6T coaxial relays. Any combination of plug-in cards is allowed, making the system the most flexible switching systems in the world!!

Extensible

RadiSwitch® plug-in cards are designed to fit in the RadiCentre® modular EMC test systems. This system has a backplane that will fit one, two or seven plug-in cards, bringing the maximum capacity of the system to 343 switches! Of course it is possible to build even larger switching systems by combining any number of RadiCentre® systems.

Easy to use

The system is “Plug and Play”, which means that every board is automatically recognised and initialised and ready for use. The user can configure and control the functionality of every individual plug-in card by means of external software or using the RadiCentre® colour TFT touch screen display.

Hardware interlock

The first relay of the RadiSwitch® plug-in card can either be used as a standard relay or as a safety interlock relay. When using this relay as a safety interlock, this enables the function to switch OFF the RF input to the amplifier, in order to prevent personnel to be subjected to high radiated RF fields. The RF interlock input can be connected to a switch on the entrance door of the test chamber.

External switch box

High power RF amplifiers are normally placed in separate test rooms with appropriate cooling facilities. To control these amplifiers a RadiSwitch® plug-in card can be connected to an external switch system which has an internal power supply to power 12VDC/24VDC/28VDC external (high power) relays.

Software support

The RadiSwitch® plug-in cards are software controllable with RS-232 or IEEE-488. Besides the RadiMation® integral EMC measurement software the system can be controlled by any EMC measurement package using control commands.

Linux Based & Software upgrades

The system is Linux based, thus offering great stability and fast start-up times. As all embedded software is stored in flash it is very easy to upgrade the system with new versions, thus protecting the initial investment.

Technical Specifications

RadiSwitch® - The EMC-RF coax switch

Performance

Frequency Band DC – 18 GHz / 40 GHz

Versions

RSW1022S	2 coaxial switches SPDT, SMA 18GHz, 240 W (1 slot)
RSW1024S	4 coaxial switches SPDT, SMA 18GHz, 240 W (1 slot)
RSW1061S	1 coaxial switch SP6T, SMA 18GHz, 240 W (2 slots)
RSW1062S	2 coaxial switches SP6T, SMA 18GHz, 240 W (2 slots)
RSW1022K	2 coaxial switches SPDT, 2.92mm (k) 40 GHz, 80 W (1 slot)
RSW1024K	4 coaxial switches SPDT, 2.92mm (k) 40 GHz, 80 W (1 slot)
RSW1061K	1 coaxial switch SP6T, 2.92mm (k) 40 GHz, 40 W (2 slots)
RSW1062K	2 coaxial switches SP6T, 2.92mm (k) 40 GHz, 40 W (2 slots)
RSW1021N	1 coaxial switch SPDT, N-type 12.4 GHz, 700 W (1 slot)
RSW1021B	1 coaxial switch SPDT, BNC-type 3 GHz, 400 W (1 slot)
RSW2002E	2 coaxial switches SP6T, external relay driver card 12/24/28VDC

Environmental conditions

Temperature range	0° C - 40° C
Relative humidity	10 – 90% (non-condensing)

Life time relays

SMA 18 GHz, SPDT	10.000.000 cycles
SMA 18 GHz, SP6T	5.000.000 cycles
K 2.92mm 40 GHz, SPDT	10.000.000 cycles
K 2.92mm 40 GHz, SP6T	2.000.000 cycles
N-type 12.4 GHz, SPDT	1.000.000 cycles
BNC 3 GHz, SPDT	1.000.000 cycles

Connectors

RF connectors SMA, N-type, BNC or k-type

Safety

Interlock Each first switch on each card can be used as a true interlock switch

Warranty

Warranty 3 years

More information

For more information contact:
DARE!! Instruments at:
+31 348 41 65 92 or instruments@dare.eu
Internet: www.dare.eu

Distributed by:



DARE!!
Instruments

Dijkstra Advice, Research & EMC Instruments B.V.
Vijzelmolenlaan 7 – NL-3447 GX Woerden - The Netherlands
Tel: +31 348 41 65 92, Fax: +31 348 43 06 45
Internet: www.dare.eu
E-mail: instruments@dare.eu