

RadiSwitch®

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 D.A.R.E!! Instruments introduces 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 18 GHz and with powers up to 200 Watts directly, or any RF power indirect using externally controlled switches. RadiSwitch® plug-in cards are available in several versions, with two or four SPDT coaxial relays or SP6T coaxial relays. Any combination of plug-in cards is allowed, making the system one of the most flexible switching systems in the world.

Extensible

RadiSwitch® plug-in cards are designed to fit in the RadiCentre® 19-inch rack-mountable modular EMC test system. This system has a backplane that will fit 8 plug-in cards, bringing the maximum capacity of the system to 512 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 8.4 inch 800 x 600 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 box using Bidi-link bi-directional LASER communication. This 19" rack mountable switch box has an internal power supply to power 12VDC/28VDC relays and can control up to 4 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.



Dijkstra Advice, Research & EMC Instruments B.V.
Vijzelmolenlaan 7 – NL-3447 GX Woerden
The Netherlands
Tel: +31(0)348 41 65 92
Fax: +31 (0)348) 49 97 32
Internet: www.dare.nl
E-mail: instruments@dare.nl

The Standard for Consultancy, (Re)design
and Training in EMC and Product Safety

DARE!!
Instruments

Technical Specifications

RadiSwitch® - The EMC-RF coax switch	
Performance	
Frequency Band	DC – 18 GHz (40 GHz optional)
RF switching capacity	200 Watt up to 2 GHz, 60 Watt up to 18 GHz / switch (cold)
Number of relays	RSW1002B: 2 relays / RSW1004B: 4 relays / RSW1006B: 2 relays

Versions	
RSW1002B	2 coaxial switches SPDT (1 slot)
RSW1004B	4 coaxial switches SPDT (1 slot)
RSW1006B	2 coaxial switches SP6T (2 slots)

Dimensions external switch box	
Height	2U
Depth	250 mm
Width	19 inch

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

Power consumption	
Supply voltage	230 VAC
Power consumption	30 W max

Connectors	
RF connectors	SMA type
Remote control external relays	Bidi-Link bi-directional LASER communication (Blue connector)

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

Warranty	
Warranty	3 years

Models	
RSW1002B	: RadiSwitch® plug-in card 2x SPDT
RSW1004B	: RadiSwitch® plug-in card 4x SPDT
RSW1006B	: RadiSwitch® plug-in card 2x SP6T
RSW1004E	: RadiSwitch® external switch box

Distributed by:

More information

For more information contact:

D.A.R.E!! Instruments at:

+31 (0)348 41 65 92 or instruments@dare.nl

Internet: www.dare.nl

Dijkstra Advice, Research & EMC Instruments B.V.
Vijzelmolenlaan 7 – NL-3447 GX Woerden - The Netherlands
Tel: +31(0)348 41 65 92, Fax: +31 (0)348 49 97 32
Internet: www.dare.nl
E-mail: instruments@dare.nl