

The Heart of each EMC Test System

Flexible · Versatile · Extensible

EMC test systems can vary from simple systems with one or two instruments to complex installations with many 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, antennas and measurement receivers, should be controlled in an automated manner. Where RadiMation acts as the software centre of the system; the RadiCentre systems are the core of the hardware.

Flexible

To cover both single instrument applications as well as small or large EMC test systems the RadiCentre mainframe is available as a one-slot (CTR1001S), four-slot (CTR1004B) or nine-slot version (CTR1009B). Each slot can be configured at the user's choice with different plug-in cards allowing any combination of functionality.



Extensible

The RadiCentre is expandable with many different plug-in cards.

- **RadiSense** the range of LASER powered E-Field Sensors up to 18 GHz
- **RadiLink** the analogue fibre optic link till 3 GHz
- **RadiField** Integrated EMC Immunity Test Solution 1 to 6 GHz
- **RadiPower** the range of RF power meters for EMC applications up to 18 GHz
- **RadiGen** the range of RF signal generators up to 6 GHz
- **RadiSwitch** to switch one, two, four or six RF signals up to 40 GHz
- **RadiControl** Antenna Tower/Positioner and Turntable controller

Space effective

Where in general controllers, probes, switches and other equipment take one or more units in a 19-inch cabinet, the RadiCentre systems allow for combining up to seven devices in just three units height (3U). The RadiCentre is available as a desktop and 19-inch rack mountable unit. This has either two- or seven free plug-in card slots as two of the slots are reserved for a power supply and PC interface plug-in card.

Easy to use

The system is "Plug and Play", which means that every plug-in card is automatically recognized, initialized and ready for use. The user can configure and control the card by means of a TFT touch screen (CTR1009B/CTR1004B).

Software support

The RadiCentre is software controllable with RS-232 or USB. The CTR1009B and CTR1004B additionally are controllable by LAN and optionally can be controlled by IEEE-488. Beside our RadiMation integral EMC measurement software, the system can be controlled by all EMC measurement packages, as all software codes to control the unit are available.



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.

RadiCentre® Modular EMC Test Systems

Technical Specifications



Performance	CTR1001S	CTR1004B	CTR1009B
Number of slots for Plug-in Cards	1	2	7
Display (TFT touch screen)	NA	7" LCD with touch screen	
Backplane		Intelligent versatile backplane	
Processor		CPU with onboard RAM and Flash	
Operating System		Linux	
Model	Desktop	Desktop or 19" rack mountable	

Dimensions	CTR1001S	CTR1004B	CTR1009B
Height	50 mm	132 mm (3U)	
Depth	254 mm	312 mm excluding projections	
Width	180 mm	19" (rack mountable)	
Weight	1,4 kg	Approx. 7 kg (empty)	

Environmental conditions	CTR1001S	CTR1004B	CTR1009B
Temperature range	10 °C - 40 °C		
Relative humidity	10% - 90% (non-condensing)		

Power consumption	CTR1001S	CTR1004B	CTR1009B
Supply voltage	12 VDC	115 VAC / 230 VAC	
Power consumption, standby	NA	< 0,5 W	
Power consumption, empty	NA	33 W	
Power consumption, maximum load	24 W	180 W	

Interfaces & cables	CTR1001S	CTR1004B	CTR1009B
Interface	RS-232 & USB	RS-232, USB and LAN. IEEE-488 optional	
Connectors	DC-Power, Sub D-9, USB-B 1.1	IEC Inlet, 2x USB-A 2.0, USB-B 1.1, LAN, Sub D-9, IEEE-488 (optional) and Interlock	
Cables	RS-232 cable, AC/DC Adapter	RS-232 cable, IEC power cord	

Safety	CTR1001S	CTR1004B	CTR1009B
Interlock	External Interlock & Interlocked LASER outputs		
Warranty	3 years (misuse excluded)		

Plug-in cards	CTR1001S	CTR1004B	CTR1009B
RadiSense	the LASER powered range of EM Field Sensors (range up to 26 GHz)		
RadiLink	the analogue optic fibre link to 5 GHz		
RadiField	Integrated EMC Immunity Test Solution 1 to 18 GHz		
RadiPower	the range of power meters up to 18 GHz for EMC applications		
RadiGen	the range of RF signal generators up to 6 GHz for EMC applications		
RadiSwitch	to switch one, two, four or six RF signals up to 40 GHz		
RadiControl	Antenna Tower and Turntable controller card for ETS-Lindgren™ motorbase		

For more information contact DARE!! Instruments at: T: +31 348 416 592 M: instruments@dare.eu W: www.dare.eu/instruments