RadiMate®

The unique AD / DA Converter for use during EMC immunity testing

The RadiMate® is a four channel high performance A/D and D/A converter. It is especially designed for use in EMC measurements where high test levels are applied to equipment under test. The RadiMate® is based on a small remote unit with four input channels that can be positioned in close proximity to the EUT in it's test environment. The RadiMate® measures and converts the analog signals into optical and interfaces to an optical plug-in card which is installed in the RadiCentre® EMC test system mainframe.

High input impedance
The extreme high input impedances of the four RadiMate® input channels makes it possible to perform measurements on EUT without influencing the behaviour of the EUT.

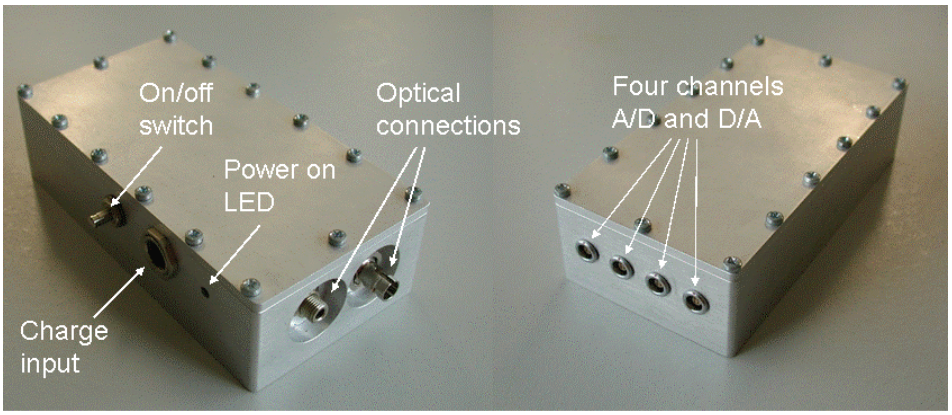
High speed
With speeds up to 60 samples per second the RadiMate® is suited for almost all high speed EUT measurement applications.

High resolution
Its unprecedented 16 bits resolution enables very accurate measurements even at very high impedances

Immunity
Immune till 300 V/m the RadiMate® is suitable for all domestic, industrial and most automotive, military and aerospace EMC measurements.

Complete solution
The complete RadiMate® system contains the following items:

- *The RadiMate® A/D - D/A converter*
- *Optical interface plug-in card for RadiCentre®*
- *10 meter duplex fibre with FSMA and ST connectors*
- *Serial cable (straight, full wired)*
- *Battery charger*
- *Four test lead cables with clips*
- *CD with manual and software*
- *LASER Power Supply (optional)*



Dijkstra Advice, Research & EMC Instruments B.V.
Vijzelmolenlaan 7 – NL-3447 GX Woerden
The Netherlands
Tel: +31(0)348 41 65 92
Fax: +31 (0348) 49 97 32
Internet: www.dare.eu
E-mail: instruments@dare.nl

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

DARE!! Instruments

Technical Specifications

RadiMate® 4 channel AD/DA converter

Performance		
Inputs	:	4 channel differential
Input Range	:	- 5 to +5 V
Input impedance	:	> 100 MΩ (buffer off); > 1GΩ (buffer on)
Input resolution	:	16 bit effective
Measuring speed[1]	:	1 Ch.: 60 Smpls/s; 2 Ch.: 20 Smpls/s; 3 Ch.: 10 Smpls/s; 4 Ch.:8 Smpls/s
Outputs	:	4 channels single ended
Output range	:	0 to +5 V
Output impedance	:	< 50 Ω
Output resolution	:	10 bit

Environmental conditions		
Temperature range	:	15° to 35° Celsius
Relative humidity	:	10 – 90% (non-condensing)
Conducted immunity[2]	:	>300 mA; 10 kHz tot 400 MHz
Radiated immunity[2]	:	>300 V/m; 30 MHz tot 4 GHz
ESD immunity[2]	:	>16 kV

Dimensions		
RadiMate	:	120 x 62 x 33 mm
Serial Interface	:	48 x 52 x 26 mm

Power		
Battery	:	NiMH pack, 7.2V / 150mAh or with optional LASER Power Supply
Autonomy	:	10 hour operation time
Charge time	:	2,5 hours
Supply Voltage	:	230 VAC
Power consumption	:	15 W

Optical Communication		
Communication speed	:	38400 bps
Communication settings	:	8 bits, no parity, 1 stop bit
Data connector to RadiMate®	:	ST
Data connector from RadiMate®	:	FSMA
Fibres	:	200/230 µm HCS, duplex
Standard Fibre length	:	10 m

More information
For more information contact:
D.A.R.E!! Instrumens at:
+31 (0)348 41 65 92 or instruments@dare.nl
Internet: www.dare.nl

Distributed by:

1) Speed may be reduced by the response time of the communication port of the PC
2) Buffer off

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Internet: www.dare.eu
E-mail: instruments@dare.nl

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