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Data Sheet

RadiSense® 10

Electric Field Probe

Models - RS2010B | RS2010H

Accurate | High Speed | Wide Band

raditeq.com

Publish date: 25/09/2020

RadiSense® 10

Models - RS2010B | RS2010H

The fast and accurate E-field probe

Accurate **High Speed** **Wide Band**

Due to a new patented technology, drastically improving the isotropic behaviour, the RadiSense® 10 is the most

Why is accuracy important?

test) and during 1-, 4- or 16-point calibrations. Based on these measurements, the power to be provided by the signal

What influences accuracy? Firstly, the size of the probe is important. The smaller the probe the better. The change from cubical to spherical probes improved the accuracy. Furthermore, aspects like amplitude linearity, frequency response, temperature drift and non-isotropic behaviour of the probe, are important parameters.

Superb Isotropy

superior design, the isotropic response of the RadiSense® 10 is improved by typically a factor of 5 compared to the competition. This will lead to a factor of 2 or more improvement of the overall measurement accuracy!

How is accuracy achieved?

volume. Patented technology is used to optimize the isotropic response. All these factors together make the RadiSense® 10 probe the most accurate, commercially available, E-Field probe in the world. Due to its unique antenna design of the

chambers or reverberation chambers.

Internal calibration data The linearity adjustment data is by default stored inside the probe. In addition, the frequency

accuracy and ease-of-use.

Performance	RSS2010B	RSS2010H
Measuring range	0,1 to 750 V/m*	
Damage level	1000 V/m	
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
Resolution	0.01 V/m	
Linearity	± 0.5 dB ± 0.5 V/m	
Isotropic deviation[1]	[illegible]	
[illegible]	1000 measurements/s	

Dimensions	
Shape of housing	Spherical
[illegible]	4.9 * 4.9 * 4.9 cm (117 cm[3])
Diameter of Spherical housing	2.5 cm (0.98 in)

Environmental conditions	
[illegible]	[illegible]
[illegible]	[illegible] (non-condensing)

Power consumption	
Accredited calibration[2]	Traceble, accredited calibration with calibration certificate (optional)
	@ 808 nm

Interfaces & cables	
[illegible]	FC/PC 200/230 µm fibre
e	ST/PC 200/230 µm fibre
e [3]	100 m maximum

Saftey	
Interlock	[illegible]
Warranty[4]	**3 years[4]**

[illegible]

[illegible]

[illegible]

[illegible]

4) After you register your new Raditeq product two (2) years of warranty will be added for free. Registration can be done at: www.raditeq.com

[illegible]

[illegible]

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Data Sheet

RadiSense® 26

Electric Field Probe

Models - RSS2026S | RSS2026H

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RadiSense® 26 Specifications

Model	RSS2026S	RSS2026H
Field measurement range	0.5 to 1000 V/m	
Max input level before damage	2000 V/m	
Frequency range	10 MHz to 26 GHz	
Resolution	0.001 V/m < 0 - 10 V/m 0.01 V/m < 10 - 100 V/m 0.1 V/m > 100 - 1000 V/m	
Accuracy		
Frequency response	± 1 dB	-2 dB to + 5 dB
Isotropy	± 0.5 dB @ 1 GHz	
Measurement speed (x, y, z and E-Tot)	100 measurements/s	1000 measurements/s
Linearity	± 0.5 dB ± 0.5 V/m	
Dimensions		
Shape of housing	stalk probe	
Electrical measuring volume	1 cm^3	
Total lenght including body	30 cm (11.81 in)	
Number of antennas	3 dipoles	
Environmental conditions		
Temperature range (operating)	**0 °C to 40 °C (32 °F to 104 °F)**	
Relative humidity (operating)	**10 % to 90 % RH (non-condensing)**	
Calibration & Power consumption		
Factory adjustment data	**Internally stored, ISO17025 calibration (RSS2026S only)**	
Accredited calibration (2)	**Traceable, accredited calibration with certifcate (optional)**	
Optical LASER power	Max. 0.5 Watt at aperture @ 808 nm	
Fibre connection & Cable		
Laser fbre optic connector - cable	FC/PC - 200/230 µm fbre	
Data fbre optic connector – cable	ST/PC - 200/230 µm fbre	
Extension fbre length (3)	Standard lengths 10m, 20m or 30m. Maximum 100m	
Safety		
Interlock	External interlock & closed loop safety system	
Warranty (4)	Three years	

[1]) **Isotropy is the maximum deviation from the geometric mean as defned by IEEE 1309-2013**

[2]) This calibration can be stored inside the probe as user correction data

[3]) **The probe is (as a standard) delivered with a 10 m extension fbre. Other fbre length to maximum 100 m available on request**

[4]) **Standard warranty is 1 year. After you register your new Raditeq product two (2) years of warranty will be added for free.** Registration can be done at: www.raditeq.com

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Data Sheet

RadiSense® 40

Electric Field Probe

Models - RSS2040S | RSS2040H

Accurate | High Speed | Robust

raditeq.com

Publish date: 22/03/2021

RadiSense® 40

Models - RSS2040S - RSS2040H

The high frequency E-field probe

Accurate **High Speed** **Robust**

Raditeq, the inventor of the first laser powered E-field probe in the world provides a full range of accurate and fast laser powered probes from 9 kHz to 40 GHz. With their long experience and extensive knowledge on laser power technology and field probe measurement technology, the RadiSense® probes provide the most reliable, high quality range of laser powered E-field probes in the market, with unprecedented measurement uncertainty.

Wide range strength measurements within a range from 0.5 V/m to 1000 V/m. This wide range makes the RadiSense® 40 ideal for EMC Automotive, Military/Aerospace and CE marking applications.

Two versions - The RadiSense® 40 is available in two versions: The RSS2040S version provides the most accurate frequency response and isotropy, with a maximum measurement speed of 100 measurements/second (individual X-Y-Z axis + isotropic value). The model RSS2040H has an increased measurement speed of 1000 measurements/second at the cost of a slightly higher uncertainty, intended for applications where speed is more important, like mode stir / reverberation chambers.

Modular - The RadiSense® 40 is intended to be used in combination with the RadiCentre modular test system, which is available as a 1-slot (RadiCentre Slim), 2-slot (RadiCentre) or 7-slot (RadiCentre Pro). The probe is connected to the laser
100 m are available on request.

Internal calibration data - The linearity adjustment data, by default is stored inside the probe. In addition, the frequency response calibration data of the X-Y-Z axis can be stored as user correction data inside the probe. As a result, there is no need to apply frequency dependent corrections for individual axis' in software anymore. This feature results in a high accuracy and ease-of-use.

Software support -The RadiSense® probes are supported by RadiMation and RadiMation Pro, automated EMC test and measurement software packages. The RadiSense® probes can also be controlled with most other brands of commercial EMC test software packages, like ETS Lindgren TILE and R&S EMC32/Elektra.

RadiSense® 40 Specifications

Model	RSS2040S	RSS2040H
Field measurement range	0.5 to 1000 V/m	
Max input level before damage	2000 V/m	
Frequency range	10 MHz to 40 GHz	
Resolution	0.001 V/m < 0 - 10 V/m 0.01 V/m < 10 - 100 V/m 0.1 V/m > 100 - 1000 V/m	
Accuracy		
Frequency response	± 1 dB	-2 dB to + 5 dB
Isotropy	± 0.5 dB @ 1 GHz	
Measurement speed (x, y, z and E-Tot)	100 measurements/s	1000 measurements/s
Linearity	± 0.5 dB ± 0.5 V/m	
Dimensions		
Shape of housing	stalk probe	
Electrical measuring volume	1 cm^3	
Total lenght including body	30 cm (11.81 in)	
Number of antennas	3 dipoles	
Environmental conditions		
Temperature range (operating)	[illegible]	
Relative humidity (operating)	10 % to 90 % RH (non-condensing)	
Calibration & Power consumption		
Factory adjustment data	[illegible]	
Accredited calibration (2)	[illegible]	
[illegible]	Max. 0.5 Watt at aperture @ 808 nm	
Fibre connection & Cable		
[illegible]	FC/PC - 200/230 µ	
	ST/PC - 200/230 µ	
	Standard lengths 10m, 20m or 30m. Maximum 100m	
Safety		
Interlock	External interlock & closed loop safety system	
Warranty (4)	Three years	

[1] [illegible]

[2]) This calibration can be stored inside the probe as user correction data

[3] [illegible]

[illegible]

Registration can be done at: www.raditeq.com

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