

s p e a g

Probes

SPEAG Probes Define Quality
with Respect to Spherical Isotropy,
Spatial Resolution and Immunity

Why are s p e a g probes special ?

SPEAG has pioneered the research and development of EM probes. All probes have been optimized using full wave 3D simulations to achieve maximum spherical isotropy by avoiding or compensating any field distortion from mounting materials. Special techniques have been developed to minimize

secondary modes of reception. Only the best low-loss materials are used, making the probes very rigid and compatible with almost any media. SPEAG has also pioneered the calibration techniques enabling the most precise measurement of electric, magnetic, dosimetric and temperature quantities.

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All probes are compatible with our DASY and EASY systems. Although the probes can be used with other data acquisition systems, full performance can only be obtained in combination with the Data Acquisition Platform of SPEAG (DAEx). Nine probe types are currently offered, each of them targeting different applications.

Item	Type	Applications
ET3D	Isotropic E-Field Probe for Dosimetric Measurements	Highly rigid probe for general dosimetric measurements from 10 MHz to 2.3 GHz (typical spherical isotropy < 0.3 dB). The probe includes an optical surface detection sensor.
ES3D	Isotropic E-Field Probe for Dosimetric Measurements	Same as ET3D but with extended frequency range (up to 4 GHz) and without optical surface detection sensor.
EX3D	Isotropic E-Field Probe for Dosimetric Measurements	Smallest isotropic probe (tip diameter: 2.5 mm). Only probe enabling compliance testing for frequencies up to 6 GHz with a precision of better than 30%.
ET1D	Single-Sensor E-Field Probe for Isotropic Dosimetric Measurements	Dosimetric probe with the highest spatial resolution (tip diameter: 1.2 mm). Isotropic measurements can be obtained with robot system (supported by the DASY4 / 5 systems). Enables measurements close to boundaries and in very strong gradients for frequencies up to 10 GHz.
ER3D	Isotropic E-Field Probe for Free Space Measurements	General free-space near-field measurements up to 10 GHz. Field components are measured in the coordinate system of the probe.
EU	Pseudo-Vector E-Field Probe	Broadband E-field probe providing information about polarization. Suitable in any medium if appropriately calibrated. Improved isotropy with three or more measurements per point. DASY5 PRO system required.
H3D	3-Dimensional H-Field Probe	The only isotropic H-field probe for measurements up to 3 GHz. Suitable for surface current measurements. Measurements in air or liquids.
HU2D	Pseudo-Vector H-Field Probe	Broadband H-field probe providing information on polarization. Improved isotropy with three or more measurements per point. DASY5 PRO system required.
T1, T1LAB	Temperature Probe for Dosimetric and General Measurements	General temperature and temperature rise measurements in RF-hostile environments. Noise less than 1 mK. T1 has a rigid tip for robot usage; T1LAB has a flexible tip for general laboratory usage.

For further information and technical specifications visit www.speag.com/probes

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