

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.

s p e a g

Probes

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

Representatives

China
Auden Techno Corp.
Phone +86-21-6163-1930-2
www.auden.com.tw

Taiwan
Auden Techno Corp.
Phone +886-3-363-1901
www.auden.com.tw

Japan/China
PTT Company, Ltd.
Phone +81-3-5781-5130
www.pttco.co.jp

Korea
Dymstec
Phone +82-31-777-8450
www.dymstec.com

USA
Beacon Technical Sales, Inc.
Phone +1-603-880-0092
www.beacon-tech.com

India
BNN Communication Engineers
Phone +91-120-421-2415
www.bnncom.com

SEMCAD X only

China
Beijing Tianyuan Technology Co., Ltd.
Phone: +86-10-6822-1702-12
www.tianyuantech.com

Italy
Telprom SRL
Phone: +39-039-326-286
www.telprom.it