



montena

Electromagnetic Free Field Sensors



Our range of derivative electromagnetic free field sensors is designed for the measurement of fast pulsed fields. Different models are available: for electric field (D-dot), for magnetic fields (B-dot). Because the sensors are passive, no external or internal power source is required. Baluns, passive integrators and a mounting kit are proposed as accessories. Free field sensors might be connected through a fibre optic link to the measurement equipment.

SPECIFICATIONS

Reference	SFE1G	SFE3-5G	SFE10G	SFM2G
Type	D-Dot (electric)	D-Dot (electric)	D-Dot (electric)	B-Dot (magnetic)
Total equ. area $A_{eq,tot}$	$2 \times 10^{-2} \text{ m}^2$	$2 \times 10^{-3} \text{ m}^2$	$2 \times 10^{-4} \text{ m}^2$	$2.2 \times 10^{-4} \text{ m}^2$
Frequency response (-3 dB)	1 GHz	3.5 GHz	10 GHz	2 GHz
Risetime (10 – 90 %)	320 ps	110 ps	32 ps	160 ps
Peak max. output	1 kV	1 kV	1 kV	1 kV
Connector type	SMA (m)	SMA (m)	SMA (m)	SMA (m)
Weight	800 g	350 g	200 g	375 g
Dimensions (L x W x H) in mm	406 x 60 x 100.5	406 x 60 x 35.4	406 x 60 x 16.4	406 x 60 x 44
Recommended balun	BL3-5G	BL3-5G	BL10G	BL3-5G
Recommended fibre optic link	MOL2000T	MOL2000T	n/a	MOL2000T



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ACCESSORIES

SFMK mounting kit

The mounting kit allows the installation of a montena free field measurement chain on an antenna mast. One free field sensor with its balun and an optional fibre optic transmitter can be fastened onto the stand. Four 1/4" x 20 UNC threads enables the installation on different supports and orientations.



SFMK mounting kit for free field measurement chains

All dimensions in mm.

