



## Ground Plane Field Sensors



Our range of derivative electromagnetic ground plane 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. Passive integrators and special cables are proposed as accessories. These ground plane sensors can be directly connected to a high impedance input of a fast oscilloscope through a special coaxial cable and a passive integrator or connected through an analogue fibre optic link. A fibre optic link might be used if the distance from the sensor to the measurement equipment is very long.

### SPECIFICATIONS

#### Sensors:

Reference	SGE2G	SGM1-8G
Type	D-Dot (electric)	B-Dot (magnetic)
Equ. area $A_{eq}$ (m <sup>2</sup> )	$5.4 \times 10^{-3}$	$1 \times 10^{-3}$
Freq. response (-3 dB)	1.5 GHz	1.8 GHz
Risetime (10 – 90 %)	0.25 ns	0.2 ns
Peak maximum output	1 kV	1.5 kV
Connector type	SMA (f)	SMA (f)
Weight	600 g	600 g
Dimensions (L x W x H)	13 x 8 x 4 cm	13 x 8 x 4.5 cm

#### Integrators:

Reference	ITR1-2U	ITR12U
Time constant	1.2 $\mu$ s	12 $\mu$ s
Frequency limit	1 GHz	150 MHz
Input / out impedance	50 $\Omega$ / 1 M $\Omega$	50 $\Omega$ / 1 M $\Omega$
Peak maximum input	1 kV	1 kV
Connector type	N	N

#### Cables:

Reference	C1-xN	C3-xN	C10-xN
Length	1 m	3 m	10 m
Frequency range	DC - 33 GHz		
Impedance	50 $\Omega$		
Input connector	SMA (x=S) or N (x=N)		
Output connector	N		