

LUMILOOP

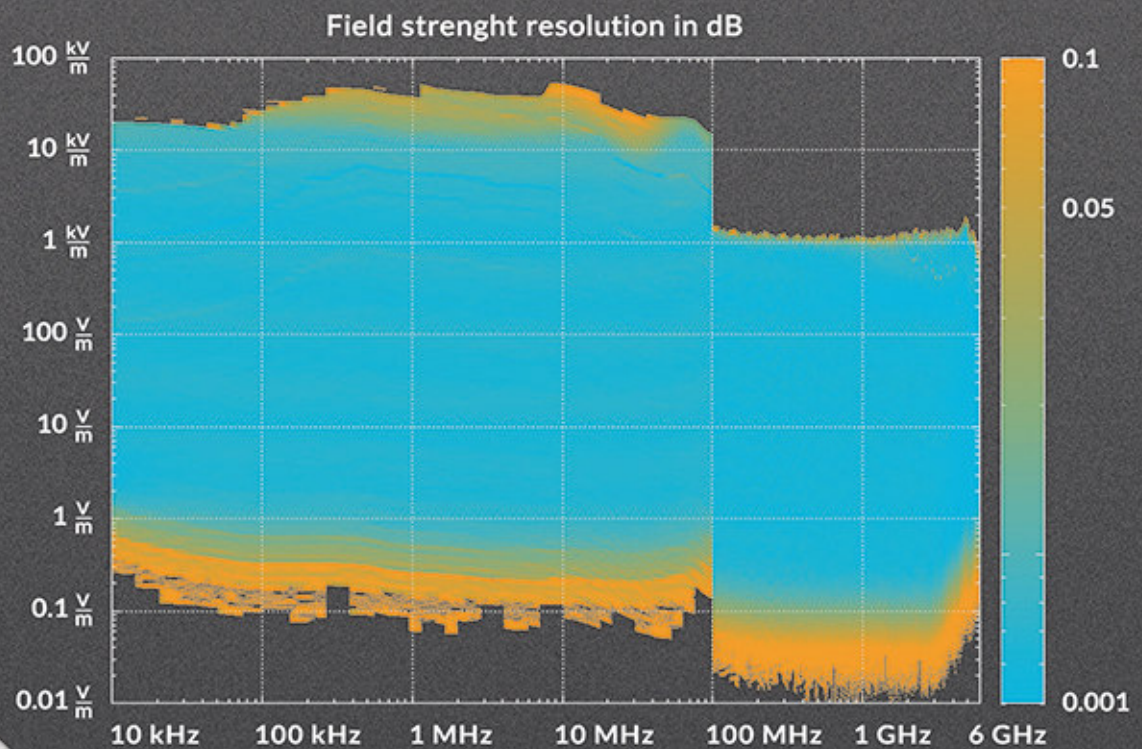
LASER-POWERED SENSOR SYSTEMS



———— LS Probe 1.2 ————

10 kHz - 6 GHz
3D E-FIELD ANALYZER

The LSProbe 1.2 – 10 kHz - 6 GHz 3D E-Field Analyzer is a smart, fast, extremely accurate electric field probe that provides linearization, temperature compensation, control, and communication functions. Noise reduction and temperature compensation allow accurate measurements down to 0.1 V/m without any adjustment. The utilized linearization technology provides dynamic range up to 100 dB.



The LSProbe-Series is laser-powered to allow for continuous operation without recharging or battery replacement. Calibration factors are provided with the probe. It communicates through optical fiber cables up to 100 meters.

Laser-Powered – No Empty Batteries

Ultra-Fast Pulse Response

Continuous Real-Time Data Streaming

Best-in-Class Frequency and Temperature Compensation

Field Sensor

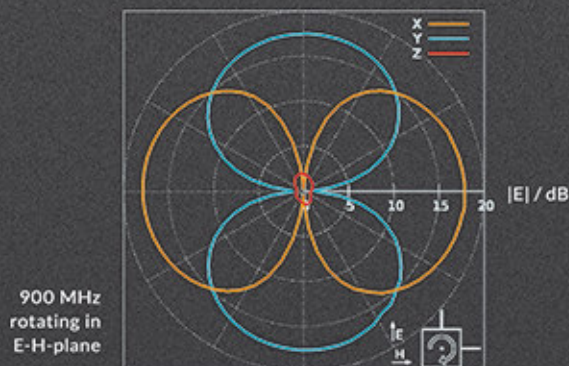
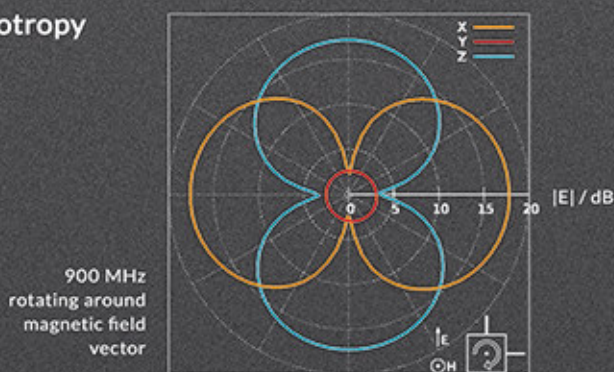
Frequency Range	10 kHz ... 6 GHz
Analog Rise Time	
10 kHz ... 100 MHz low Bandwidth	4 μ s
10 kHz ... 100 MHz high Bandwidth	40 ns
100 MHz ... 6 GHz	25 ns
Minimum Pulse Width	
Burst Mode	500 ns
Streaming Mode	2 μ s
Resolution	<0.01 dB
Sampling Rate	
Burst Mode	2 MSample/s
Streaming Mode	>500 kSample/s
Field Strength	
10 kHz ... 100 MHz	<1 V/m ... >10 kV/m
100 MHz ... 6 GHz	<0.1 V/m ... >700 V/m
Damage Level	
10 kHz ... 100 MHz	40 kV/m
100 MHz ... 6 GHz	10 kV/m
Dynamic Range	
10 kHz ... 100 MHz	80 dB ... 100 dB
100 MHz ... 6 GHz	70 dB ... 80 dB
Isotropy, @900 MHz	<1 dB
Amplitude Accuracy	
10 kHz ... 10 MHz (1,5 V/m to 30 V/m)	1.3 dB
>10 MHz ... 1 GHz (1 V/m to 80 V/m)	1.5 dB
>1 GHz ... 8 GHz (3 V/m to 100 V/m)	1.0 dB
Linearity Error	<0.1 dB
Temperature Stability	0.1 dB
Ambient Temperature	10 °C ... 40 °C
Dimensions (W x D x H)	46 x 46 x 114 mm ³

Computer-Interface

PC Interface	USB 2.0
Application Software	LabView - based
R&S EMC32 Driver	available Q3/2016
Burst Trigger Output Level	3.3 V CMOS
Burst Trigger Output Connector	BNC
Laser - Wavelength	850 nm
Laser - Output Power	750 mW
Laser - Shutdown Time	1 ms
Fiber Optic Connector	FC / ST
Fiber Optic Cable Length	15 m
Max. Fiber Optic Cable Length	100 m (sold on request)
Input Voltage*	5 V \pm 5%
Input Current	<2 A
Ambient Temperature	10 °C ... 40 °C
Dimensions (W x D x H)	135 x 38 x 120 mm ³

*power supply included

Isotropy





LUMILOOP GmbH

Topfmarkt 1
01936 Königsbrück
Germany

Phone: +49 (0) 351 / 463 36426
E-mail: info@lumiloop.de

www.lumiloop.de



EUROPÄISCHE UNION

Gefördert durch:



Bundesministerium
für Wirtschaft
und Energie

aufgrund eines Beschlusses
des Deutschen Bundestages

EXIST

Existenzgründungen
aus der Wissenschaft