

## EM9N/EM9D Broadband Electromagnetic Field Meter

### Key Benefits

- Double efficiency in monitoring EMF than traditional methods
- Built-in GNSS receiver, electronics compass, temperature & humidity sensors
- Scenic and surrounding view with built-in HD camera
- Operation procedure and log with geographical information
- Auto-generation of drive test data
- User-defined measurement templates
- Bluetooth, Wi-Fi and USB-C communication interface
- Screen capture and measurement recording for public/environment safety law enforcement
- 4GB RAM and 16GB ROM internal memory
- Cloud sever upload and integration
- Support power frequency probe

### Applications in EMF safety measurement and monitoring

- Public / Environmental
- 5G base station / cell tower
- TV and radio broadcasting tower
- Public safety regulation compliance
- Aviation, marine and railway system

### Main Features

#### EM9N

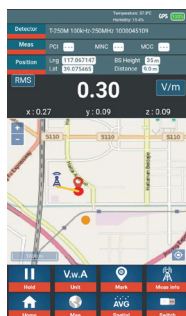
##### 1. Time-Average Field Strength:

Real-time field intensity display, spectral line mode and measuring cylinder mode.



##### 2. Map:

Field strength map display, including automatic and manual point.



##### 3. Spatial:

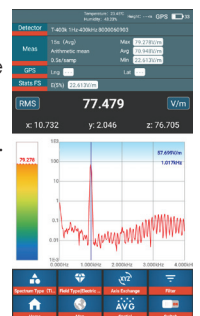
Spatial average. Multiple spatial averages can be combined and saved into a single record file for easy viewing.



#### EM9D

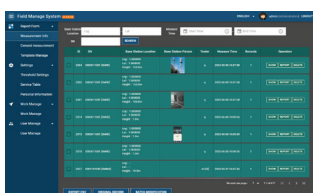
##### 4. Spectrum:

Power frequency test interface in electric field environment.

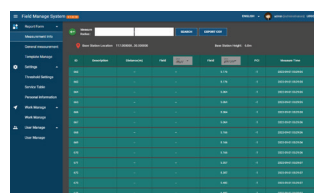


### Backend Server - Work Order Management

#### Test record query



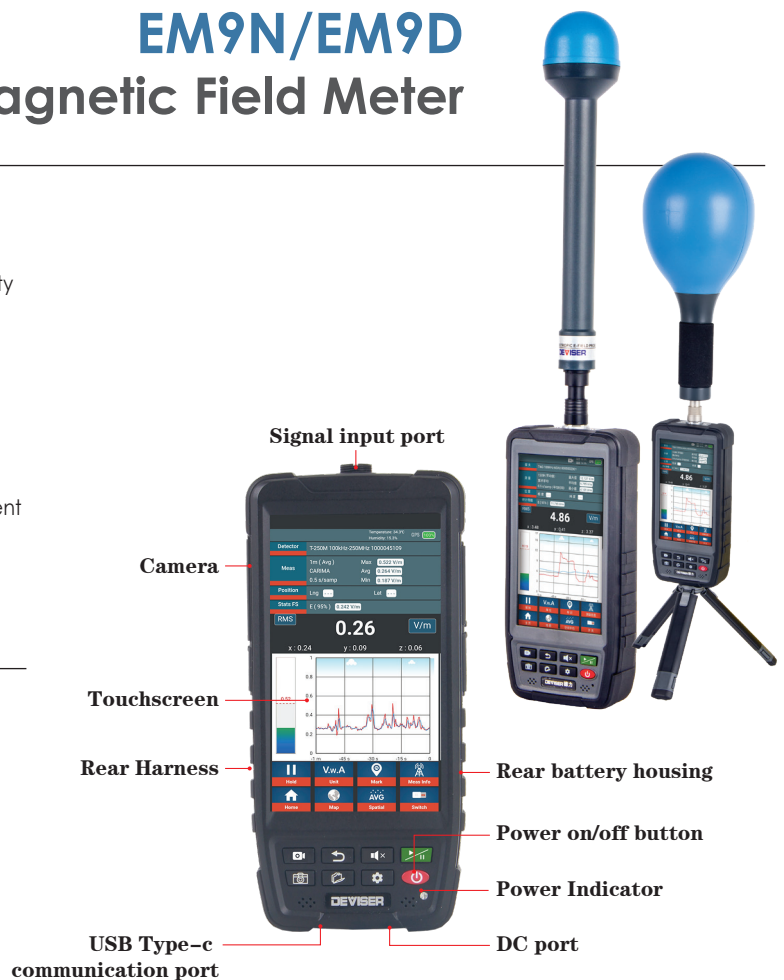
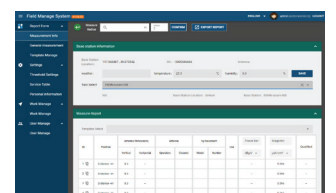
#### Test record details



#### Test report



#### Report export



## Ordering information (EM9N)

Item	Description	Configuration
EM9N	Broadband Electromagnetic Field Meter	Standard
Carry Case	Black plastic case	Standard
Power adapter	12VDC/2A adapter	Standard
T-6G	100 kHz to 6 GHz probe	Standard
EM20 RF Electromagnetic Field Calibrator	5V/m Accuracy $\pm 0.5\text{dB}$	Optional
Tripod	—	Optional

## Ordering information (EM9D)

Item	Description	Configuration
EM9D	Broadband (DC) sampling or FFT Spectrum analysis (dual channel)	Standard
Carry Case	Black plastic case	Standard
Power adapter	12VDC/2A adapter	Standard
T-400K	Low Frequency Electromagnetic Field Probe	Standard
EM20 RF Electromagnetic Field Calibrator	5V/m Accuracy $\pm 0.5\text{dB}$	Optional
Tripod	—	Optional

## Specification

EM9N (single channel) / EM9D (dual channel)

Frequency Range	DC to 40GHz (probe dependent)	Measurement Mode	Broadband (DC) sampling or FFT Spectrum analysis (dual channel)
Display Range	0.001 to 999 V/m	Measurement Unit	Electric Field - kV/m, V/m, mV/m, W/m <sup>2</sup> , mW/cm <sup>2</sup> , $\mu\text{W}/\text{cm}^2$
Interface	12-pin aviation socket, USB-C, AC/DC power adapter		Magnetic Field - T, mT, $\mu\text{T}$ , nT, pT, fT, A/m, mA/m, $\mu\text{A}/\text{m}$ , nA/m, G, mG, $\mu\text{G}$ , nG
Built-in Sensor	GNSS/Beidou, Wi-Fi, Bluetooth, electronic compass, temperature, humidity, and laser height measurer	Memory	4G RAM/16G ROM up to thousands of pictures and video clips
Power Supply	DC 12V/2A adapter	Operating Hours	>10 hours
	Li-Ion battery 7.4V/5A (37W)	Operating Temperature	-10°C to +50°C

## T-8G Broadband Probe (Electric Field)

Frequency Range	100kHz to 8000MHz
Measurement Range	0.2V/m to 650V/m (CW), 0.2V/m to 20V/m (RMS)
Frequency Response	$\pm 1.5\text{dB}$ (900MHz to 3GHz) $\pm 2.5\text{dB}$ (< 900MHz, >3GHz)
Probe	Electric field, X/Y/Z 3-axis, omni-directional
Probe Sensor	Diode Dipole
Linearity Error	$\pm 0.5\text{dB}$ (@1GHz)
Isotropic	$< \pm 1\text{dB}$ (@1GHz)
Calibration Frequency (MHz)	0.1/0.15/0.2/0.3/1/3/10/27/30/50/100/ 200/300/400/500/600/700/750/790/910/1000/1800/2450/2700/3000/4000/5000/6000/8000
Calibration Cycle	24 months

## T-6G Broadband Probe (Electric Field)

Frequency Range	100kHz to 6000MHz
Measurement Range	0.2V/m to 650V/m (CW), 0.2V/m to 20V/m (RMS)
Frequency Response	$\pm 1.5\text{dB}$ (900MHz to 3GHz) $\pm 2.5\text{dB}$ (< 900MHz, >3GHz)
Probe	Electric field, X/Y/Z 3-axis, omni-directional
Probe Sensor	Diode Dipole
Linearity Error	$\pm 0.5\text{dB}$ (@1GHz)
Isotropic	$< \pm 1\text{dB}$ (@1GHz)
Calibration Frequency (MHz)	0.1/0.15/0.2/0.3/1/3/10/27/30/50/100/ 200/300/400/500/600/700/750/790/910/1000/1800/2450/2700/3000/4000/5000/6000
Calibration Cycle	24 months

## T-400KHz Low Frequency Electromagnetic Field Probe (For EM9D Only)

T-400K Technical Specifications		
	Electric field	Magnetic field
Sensor type	Isotropic patented electrodes	
Frequency range	1Hz to 400kHz	
Field Strength Mode		
Measurement range	1V/m to 100kV/m	50 nT to 20mT ( 50Hz) 50 nT to 10mT (100Hz to 10kHz)
Graphical display	RMS,Axis Values,AVG,MAX ,MIN,PEAK,RMS time graph	
Peak value	Digital realtime	
Resolution	<1mV/m	<1nT
Noise Level	<1V/m (10Hz to 400kHz)	<50nT (10Hz to 400kHz)

FFT Mode		
Measurement range	10mV/m to 100kV/m	1 nT to 20mT (50Hz) 1 nT to 10mT (100Hz to 10kHz)
Graphical display	Frequency analysis, total field and axis	
SPAN	400Hz, 4kHz, 40kHz, 400kHz	
FFT Point	1024 point FFT	
Noise Level	<10mV/m	<1nT
General		
Isotropy	$\pm 0.5\text{dB}$ ( $\pm 10\%$ )	$\pm 0.25\text{dB}$ ( $\pm 4\%$ )
Damage level	>200kV/m	>1000mT up to 60Hz
Linearity	$\leq 2\%$	
Weight	About 460 g	
Probe size	325 x 128 mm $\Phi$	