![DEVISER]

# Frequency & Code Selective EMF Analyzer
EM860

Key Benefits

- Safety Evaluation
- Spectrum Analysis
- Level Recorder
- Analysis of electromagnetic field strength
- 5G NR code selective EMF measurement
- LTE code selective EMF measurement
- 3G UMTS code selective EMF measurement
- Powerful background data management system

Superior Performance

Details

Safety Evaluation

Spectrum Analysis
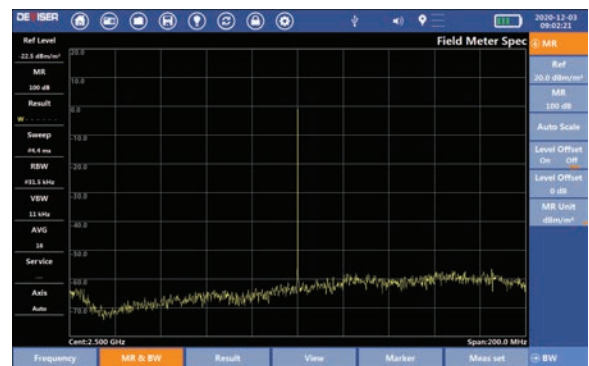
| Safety Evaluation	
Result	Shows field meter of each service by histogram
Number of services	1 to 100, the parameters of each service is defined by user
Channel bandwidth of one service	1 MHz to 6 GHz
RBW	30 kHz, 100 kHz, 300 kHz, 1 MHz, 3 MHz
Detector	RMS
Axis	X, Y, Z axis for single-axis and Three-Axis

| Spectrum Analysis	
Result	Spectrum Analysis
RBW	1 Hz to 3 MHz
VBW	1 Hz to 3 MHz
Result types	Act : Display instantaneous spectrum Max : Maximum hold function Avg : Average over a selectable number of a selectable time period spectrum Max Avg : Maximum hold function after averaging Min : Minimum hold function Min Avg : Minimum hold function after averaging
Detector	RMS
Axis	X, Y, Z axis for single-axis and Three-Axis

Level Recorder

Level Recorder

| Result	Selective level measurement at a fixed frequency setting
RBW	15 Hz to 2 MHz
VBW	1 Hz to 3 MHz
Result types	Peak ACT: Displays the actual peak value Peak MAX : Max hold function for peak value RMS ACT : Averaging over a defined time period RMS MAX : Max hold function for RMS values
Axis	X, Y, Z axis for single-axis and Three-Axis

Scene Recorder
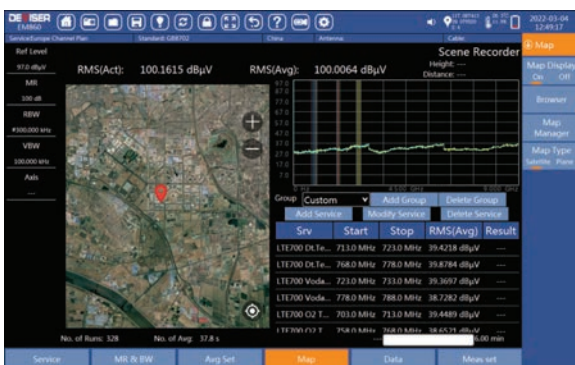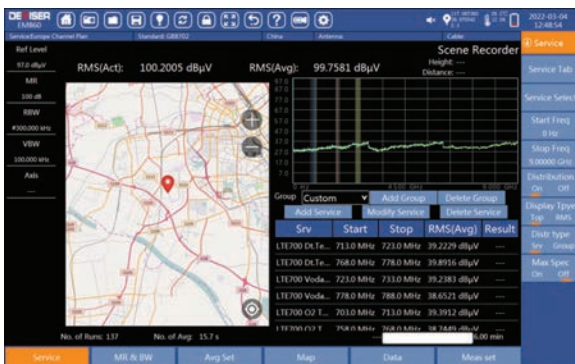
Scene Recorder

Result	Real time display of field strength in GIS
Result types	It supports designated frequency point, field strength measurement of specified axis and display on GIS
Multiple source location modes	Support work order positioning, rangefinder positioning, input latitude and longitude positioning
Map type	Online map, offline map, satellite map
Data transmission	Support the upload of measurement data to the background system by 4G, WLAN or LAN.
Task distribution	Support the measurement work orders through the background system.
Axis	X, Y, Z axis for single-axis and Three-Axis

5G NR code selective EMF measurement
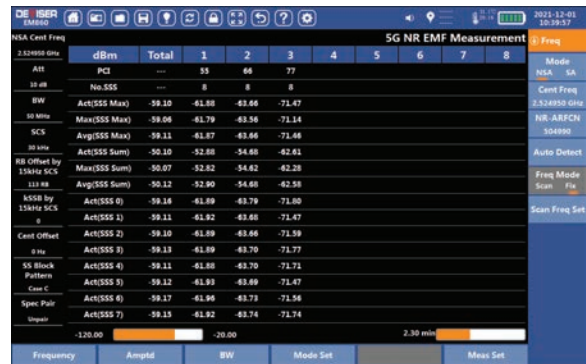
5G NR code selective EMF measurement

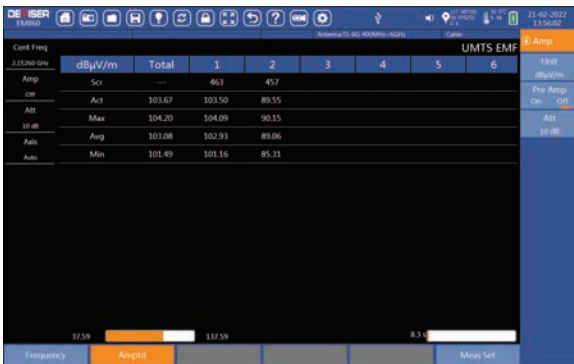| Result	5G NR synchronize signal power of each beam of multiple Cells in the same frequency
Result types	PCI , No.SSS , Act(SSS Max) , Max(SSS Max) , Avg(SSS Max) ,Act(SSS Sum) , Avg(SSS Sum) , Act(SSS0~SSS7)
Channel Bandwidth	5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 70 MHz, 80 MHz, 90 MHz, 100 MHz
Detection	RMS
Axis	X, Y, Z axis for single-axis and Three-Axis

LTE code selective EMF measurement
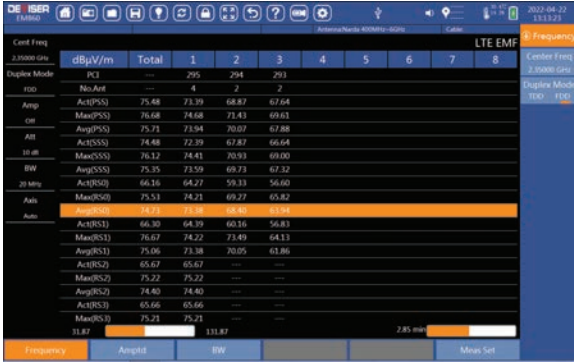
LTE code selective EMF measurement

Result	LTE synchronize signal and reference signals power of multiple Cells in the same frequency
Result types	PCI , Act(PSS) , Max(PSS) , Avg(PSS) , Act(SSS) , Max(SSS), Avg(SSS) , Act(RS) , Max(RS), Avg(RS) , Total values
Channel Bandwidth	1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz
Detection	RMS
Axis	X, Y, Z axis for single-axis and Three-Axis

3G UMTS code selective EMF measurement

3G UMTS code selective EMF measurement

Result	UMTS Scr and CPICH channel power
Result types	Scr, Act(CPICH), Max(CPICH), Min(CPICH), Avg(CPICH) and total values
Channel Bandwidth	5 MHz
Axis	X, Y, Z axis for single-axis and Three-axis

Field Meter Scope

Field Meter Scope

Result	Time domain signal field strength
Bandwidth	Time RBW: 30kHz, 60kHz, 120kHz. 480kHz. 960kHz. 1.92MHz, 3.64MHz, 7.68MHz, 15.36MHz, 30.72MHz, 61.44MHz, 122.88MHz.
Sweep Time	5ms, 10ms, 20ms, 40ms
Axis	X, Y, Z axis for single-axis

5G NR Multi Path

5G NR Multi Path

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Result	It indicates the amount of power of the dominant pilot signal that is dispersed outside the main correlation peak due to multipath echoes that are expressed in dBm.
Result types	P-SS RSRP, S-SS RSRP, Delay
Channel Bandwidth	5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 70 MHz, 80 MHz, 90 MHz, 100 MHz
Axis	Single-axis

5G NR Field Statistic
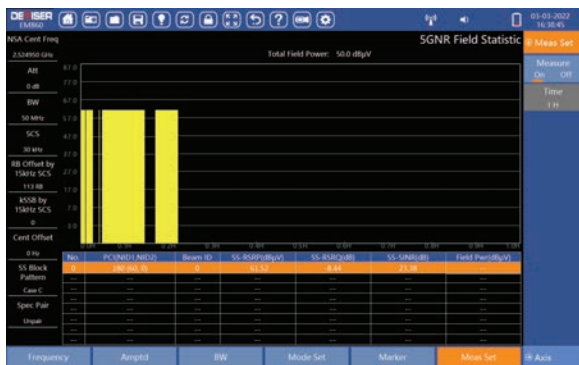
5G NR Field Statistic	
Result	The static of field power within all bandwidth in one period.
Result types	PCI, Beam Index, SS-RSRP SS-RSRQ SS-SINR , Field Power
Channel Bandwidth	5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 70 MHz, 80 MHz, 90 MHz,100 MHz
Axis	X, Y, Z axis for single-axis and Three-axis

Powerful background data management system
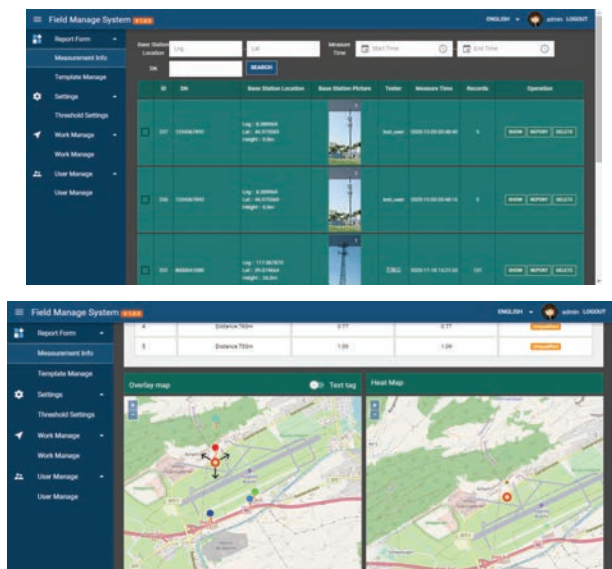
Data management system	
Work order management	You can customize the work order, specify the measurement location and surveyor. Simplify the work
User management	Edit different users to work with the work order function
Data management	Query and manage data. You can mark the surrounding buildings and places later
Report template management	Custom report template can be used to generate and export reports according to their own format when exporting reports.
Report export	Export the specified measurement to doc or CSV format to facilitate data management
Support multiple devices	Support for EM9 and EM860

SPECIFICATIONS

Basic Unit

Operating modes	
Measurements vs. frequency	● Spectrum Analysis ● Safety Evaluation
Measurements vs. time	● Level Recorder
Measurements on mobile networks	● 5G NR / TDD LTE / FDD LTE/3G UMTS Demodulation
RF	
Frequency range	100 kHz to 9 GHz
RBW	See specifications for each mode
Phase Noise	Typical<-105 dBc/Hz@ 100kHz offset from 1GHz
Frequency accuracy	< ±1 ppm
Displayed Average Noise Level (DANL)	Amplifier OFF: ≤-135dBm, 10MHz~3GHz、 ≤-130dBm, 3GHz~6GHz、 ≤-125dBm, 6GHz~9GHz;

	Amplifier ON: ≤-155dBm, 10MHz~3GHz、 ≤-150dBm, 3GHz~6GHz、 ≤-145dBm, 6GHz~9GHz、
Level accuracy	±1.5 dB (+20℃ - +30℃)
RF input	N type/50Ω
Maximum RF power level	+25dBm（peak power/entrance attenuation>15dB）; ±50VDC

Three axis electric field antenna TS-6G

Frequency range	TS-6G(200MHz to 6 GHz)
Antenna type	E-field
RF connector	N-Connector, 50Ω

Three axis antenna (H-field)

Frequency range	TS-250M(100KHz to 250MHz)
Antenna type	H-field
RF connectore	N-Connector, 50Ω