E Series electromagnetic field intensity spectrum analyzer

E series electromagnetic field intensity spectrum analyzer is a multifunctional portable and highly accurate meter suitable for all electric field and magnetic field measurement. All models are available with a spectrum analysis function. The system includes a electric field with wide range a magnetic field probe with measurement frequency from 1Hz to 18GHz and a portable display meter. It has a large LCD display and easy function keys (which allow different operation and selection functions according to different command menu).

E series electromagnetic field intensity spectrum analyzer is composed of 2 categories - low frequency and high frequency.

- Low frequency: Model E61, E62, frequency: 1Hz- 30MHz
- High frequency: Model E71, E72 E73, frequency:1MHz-18GHz

Application —(low frequency)

High voltage transmission system, distribution room, induction furnace, metro, electric car, computer room, sensitive equipment room, hospital and other workplaces

— (high frequency)

All kinds of long wave, middle wave, short wave, and microwave radiation, including: mobile phone base stations, medical equipment, radar, satellite communication, TV antenna pager station, heat sealing machine, drying equipment , and other workplaces with electromagnetic radiation.

Features

Wide range:	Frequency range from 1Hz to 18GHz is covered by different probes.
Large graphic LCD display:	A great deal of data can be displayed simultaneously with graph and bar chart.
Spectrum analysis:	All models have function of spectrum analysis enabling to set precisely the electromagnetic intensity.
Measure several parameters simultaneously:	Analyze electric field and magnetic field simultaneously in units of V/m, Tesla, Gauss, A/m, dBm, V/m, A/m, dBμV, W/m², pW/m², μW/m²

Multiple parameter to display operation :	Display MIN ,MAX, AVG values, top 3 marking value, public output limits value etc.
Operation function:	An operation key to calculate limit value of radiation exposure.
Power:	Rechargeable NiMH high-energy battery and wide voltage power adapter.

Low frequency(including power frequency)Electromagnetic field intensity spectrum analyzer E6X Series(Frequency: 1Hz- 30MHz)

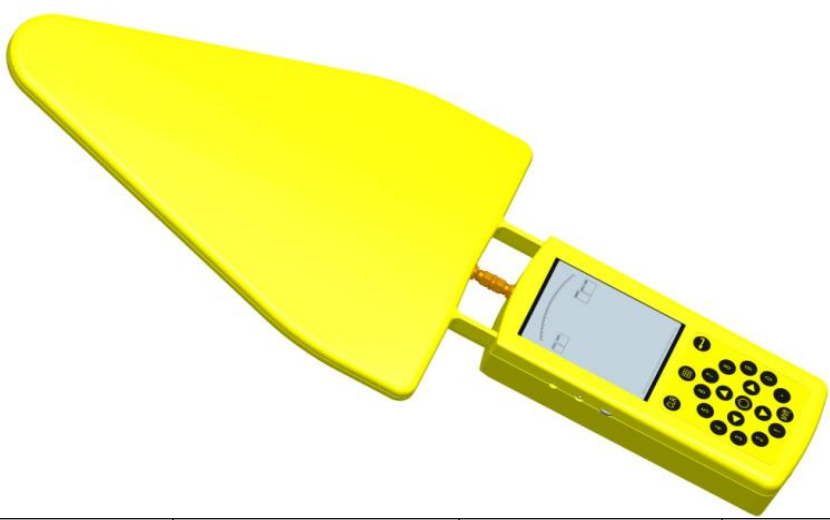
Low frequency electromagnetic field intensity spectrum analyzer	E61	E62
Response frequency	10Hz - 400kHz	1Hz - 1MHz (expandable to 20MHz or 30MHz)
Measurement range of magnetic field	10μG - 5G	10μG - 50G
Measurement range of electric field	0.1V/m - 50kV/m	0.01V/m - 100kV/m
Bandwidth of filter	1Hz - 400kHz	1Hz - 1MHz
Precision	4%	2%
Units of display	V/m, Tesla, Gauss, A/m	V/m, Tesla, Gauss, A/m
spectrum analyzer	Yes	Yes
Public output limits(%) (ICNIRP BGV B11 BlmSchV etc.)	Yes	Yes
ICNIRP exposure limits	N/A	Yes
X Y Z axis and 3D magnetic field display	Yes	Yes
Bar graph display	Yes	Yes

Display top 3 marking value (Display the top 3 of intensity vale and the corresponding frequency within measurement range)	Yes	Yes
Display RMS value and peak value	Yes	Yes
Rechargeable battery and wide voltage power adapter	Yes	Yes
Sound alarming	Yes	Yes

E62 option: -20M (Frequency range expands to 1Hz - 20MHz)
E62 option: -30M (Frequency range expands to 1Hz - 30MHz)

High frequency electromagnetic field intensity spectrum analyzer E7X Series

(Frequency: 1MHz-18GHz)

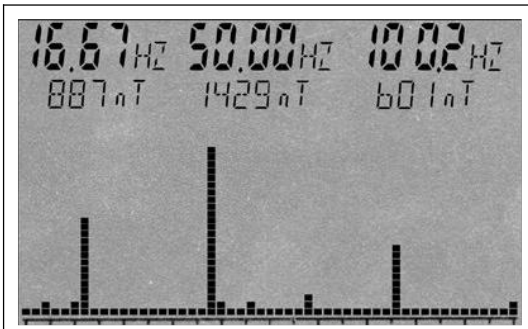
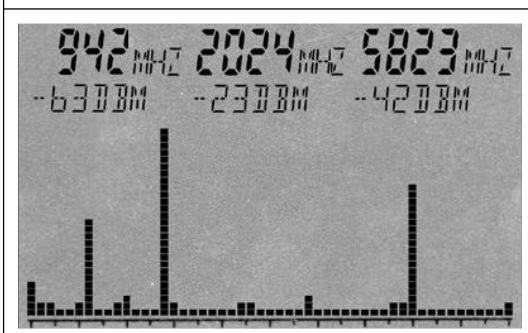


High frequency electromagnetic field intensity spectrum analyzer	E71	E72	E73
Response frequency	100MHz - 4GHz	10MHz - 6GHz	1MHz - 9GHz (optional probe with response frequency 700M-18GHz)
Measurement range of magnetic field	0 - 10A/m	0 - 50A/m	0 - 50A/m
Measurement range of electric field	0 - 100V/m	0 - 500V/m	0 - 1000V/m
Bandwidth of filter	100kHz - 50MHz	10kHz - 50MHz	1kHz - 50MHz
Precision	3dB	2dB	1dB
Units of display	V/m, A/m, dBm,	V/m, A/m, dBm,	V/m, A/m, dBm,

	dBμV, W/m²	dBμV, W/m²	dBμV, W/m²
Spectrum analysis	Yes	Yes	Yes
Minimum measurement value	-80dBm	-130dBm	-150dBm
Extended exposure limits	N/A	Yes	Yes
X Y Z axis and 3D magnetic field display	Yes	Yes	Yes
Bar graph display	Yes	Yes	Yes
Display top 3 marking value (Display the top 3 of intensity value and the corresponding frequency within measurement range)	Yes	Yes	Yes
Display RMS value and peak value	Yes	Yes	Yes
Rechargeable high-energy battery	Yes	Yes	Yes

Option: - BROAD (Add the function of broadband analyzer)
- 18G (Ultra-high frequency probe with range of 700M-18GHz matched with E73 host)

Spectrum analysis shown on screen

	E62 Signal#1=1667Hz (traction power) at 887nT Signal#2=5000Hz (mains power) at 1429nT Signal#3=1002Hz (harmonic of mains power) at 601nT
	E72 Signal#1=942MHz (GSM communications) at -63dBm Signal#2=2024MHz (UMTS) at -23dBm Signal#3=5832MHz (802.11a WLan) at -42dBm

Test comparison to 8053 electromagnetic field analyzer of Italian PMM company(Internal test):

Actual electric field value (V/m)	Frequency MHz	E71 test value(V/m)	PMM8053 test value(V/m)
1	800	1.032	1.13
3	800	3.078	3.09
6	800	6.043	6.15
1	1000	1.094	1.24
3	1000	3.027	3.12
6	1000	6.121	6.27
1	2000	1.214	1.56
3	2000	3.231	3.72
6	2000	6.365	7.05

Part of customer lists:

Boeing Airplane manufacturer

Airbus airplane manufacturer

BMW motor company

Siemens

IBM

Philips Holland

Frankfurt airport

German aerospace centre

Spectrum analysis software (Option)

It is strongly recommend that users choose to purchase spectrum analysis software it is more accurate and flexible than the instrument screen in analyzing the relations among frequency time and intensity.

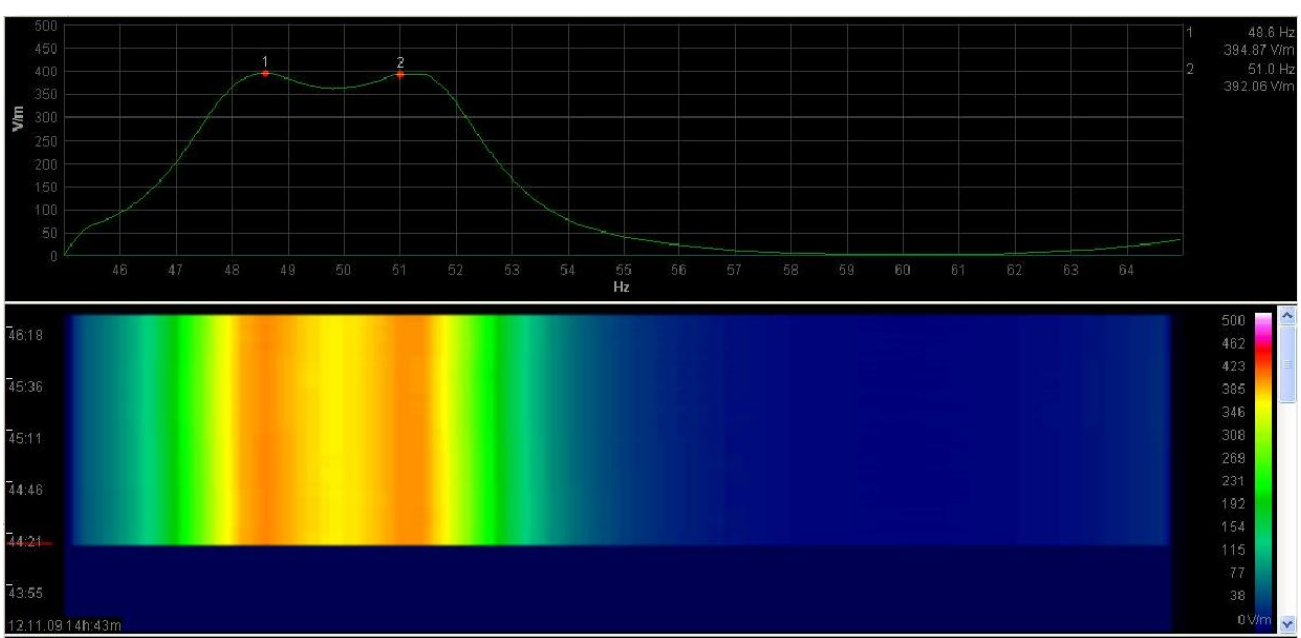
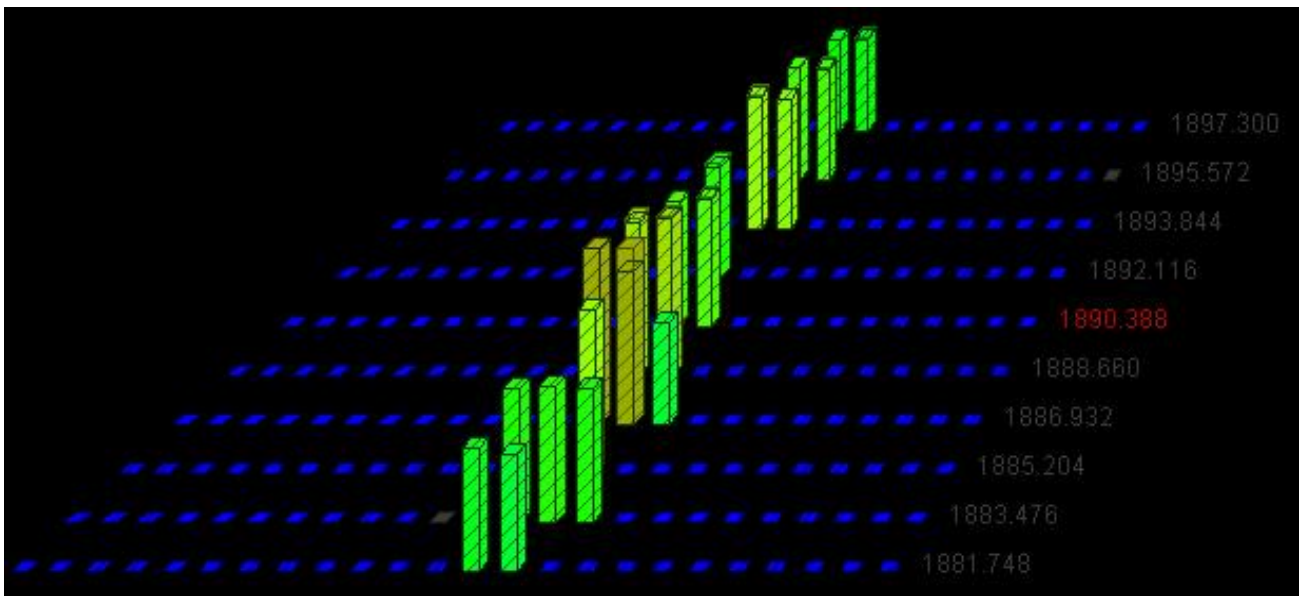


Photo above:Spectrum generated by 50Hz transformer

Photo below:Spectrum generated by 1800MHz emission system of mobile phone



Appendix

Test report made by internal testing organization for electromagnetic field intensity spectrum analyzer E62、E72 (Shanghai institute of measurement and testing technology).

Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.

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