

Electromagnetic Field Intensity Analyzer E300



Professional interface of the operating system

4.3inches color touch LCD screen

DC~60GHz isotropic electric and magnetic field probe

Enviromental level of ionizing radiation probe(γ ray)

Description

Electromagnetic field intensity analyzer E300 is designed by Coliy Technology GmbH. E300 contains wide range probes of ionizing radiation(X and γ ray) and non-ionizing radiation(<60GHz), adding the function of DC magnetic field detection(be used in the application of DC power transmission and transformation, magnets, geomagnetic field, etc.) .



Electromagnetic field intensity analyzer E300 is a versatile, easy to use, high-precision magnetic measurement instrument, both non-ionizing radiation and ionizing radiation can be detected. There are various kinds of probes, the frequency of the electric field is from 1Hz to 60GHz, the magnetic field is from DC to 1MHz, for the non-ionizing radiation; energy response of the ionizing radiation probe is from 15keV to 7MeV. The host is equipped with 4.3inches color LCD, the GPS sensor is optional to display geographic location. Rigorous style of German design can be felt through the professional bright BIGDISP. The E300 host identifies the probe's parameters including the basic information and the

calibration parameters automatically, the probe can be connected to the host directly without any loss of calibration accuracy.

Electromagnetic field intensity analyzer E300 can be used in scientific research, laboratory, environmental protection, electric power research institute, disease control, communications, military and so on. The E300 can be used as the smartphone owing to the more simple graphical interface which breaks the style of traditional keyboard, there will be a wonderful experience to the customers.

Application

Non-ionizing radiation

— (Low frequency)

Magnetic materials

Geomagnetic field

Metro electromagnetic of environmental radiation monitoring

AC and DC high voltage power transmission system

Distribution rooms, Computer rooms, Equipment rooms and other sensitive workplace

— (High frequency)

Electromagnetic of environmental radiation monitoring

Defense electronic equipment electromagnetic safety monitoring

High frequency radiation of medical instrument

Mobile phone base stations and satellite communication system

Radio management and mobile communications

Electromagnetic environment of aerospace equipment and airport radar

The field of EMC: EMC test, research at institutes and universities

Electromagnetic environment of industrial field, such as welding equipment, high-frequency heating and so on

Ionizing radiation

Inspect food pollution

Inspect radioactivity of liquid

Inspect environmental pollution

Inspect radioactivity of underground drilling pipes and equipment

Inspect radioactivity of materials architecture such as stone etc.

Inspect harmful radiation in personal precious property and jewelry

Inspect radioactivity of porcelain tableware and glass etc.

Inspect local release of radiation and nuclear radiation pollution

Inspect landfill and garbage dumps in danger of nuclear radiation contamination

Inspect X-ray intensity of Medical and industrial X-ray instrumentation

Features

Optional GPS sensor

4.3inches color touch LCD screen

Storage up to 8000 measurement data

Interface to PC via USB or optical fiber

Isotropic electric and magnetic field probe

Probe types identified automatically and prompt next calibration date

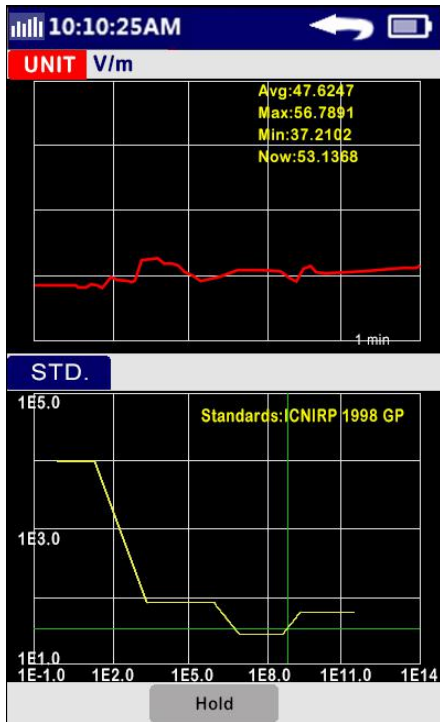
Frequency of non-ionizing radiation is DC~60GHz

Energy response of ionizing radiation probe is 15keV~7MeV

Rechargeable 4500mAH lithium battery and wide-voltage power adapter

Units: non-ionizing radiation V / m, T, Gauss, A / m, dBm, W / m², %, etc.

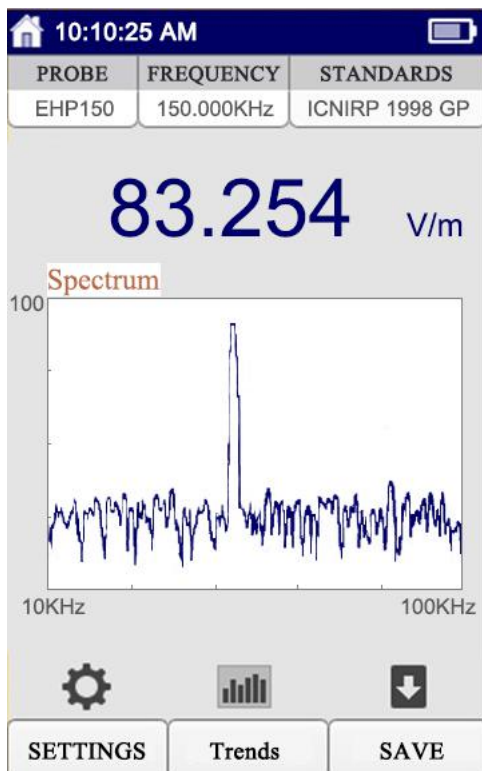
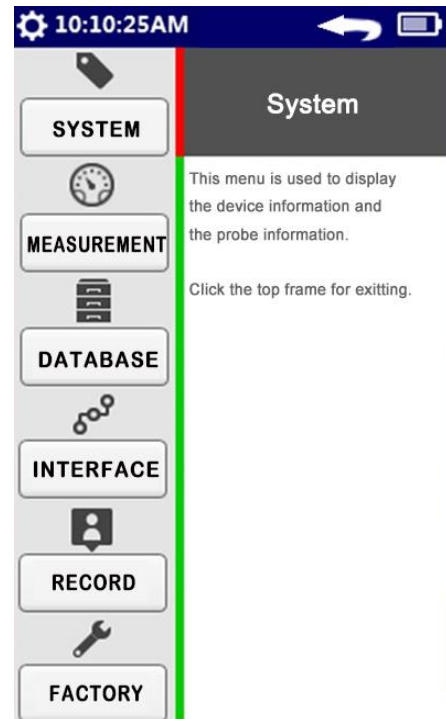
ionizing radiation Sv/h, Gy/h, rem/h, Sv,cps,etc.



Real value, maximum value, minimum value, average value and reference standard can be displayed on the trend chart, simple and intuitive.

Professional interface of the operating system, easy to use!

Coliy develops a set of revolutionary intelligent operating system owning unique menu interface. The customer can use the E300 as using the smartphone, there will be a new experience by using this system.



Spectrum mode is new added in the isotropic electric and magnetic field as one probe, which can be used to ascertain the main pollution sources in the environment quickly.



Specification

Display type	4.3 inches color touch LCD screen	
Operation interface	Smart operation system (English/Chinese)	
Unit	Non-ionizing radiation: V/m, Tesla, Gauss, A/m, dBm, W/m ² , % Ionizing radiation: Sv/h, Gy/h, rem/h, Sv, cps, etc.	
Range	Non-ionizing radiation 0.01V/m to 100kV/m 0.5nT to 10mT 0.1μW/m ² to 30.000mW/m ² 0.0001 % to 9999 %	Ionizing radiation Dose equivalent rate:0.001~200μSv/h Absorbed dose rate: 0.001~150μGy/h Sensitivity:1μGy/h≥1500cps Precision:15%
Result type	Normal mode: real value, max value, min value, average value, alarm threshold, % XYZ mode: real value, X/Y/Z axis projection values, alarm threshold, % Spectrum mode(only for low frequency probe): real value, spectrogram	
Storage capacity	Up to 8000 data	
Software	Transmit data in real-time to computer for displaying analyzing and recording	
Interface	USB or Optical fiber interface	
GPS sensor	GPS sensor(optional)	
Probe	Frequency of non-ionizing radiation:DC~60GHz Energy response of ionizing radiation:15keV~7MeV,plug and play	
Calibration cycle	Host: 24 months Probe: 12months	
Battery	Removable,rechargeable lithium battery 4500mA	
Continuous working mode	20 hours	
Power saving mode	40 hours	
Temperature	Operating: -15 °C to +50 °C Storage: -30 °C to +70°C	
Humidity	5% to 95%, non-condensing	
Host size	233× 98 ×50 mm	
Weight	500g(without probe)	
Product standard	According to European standards: CISPR, VDE, MIL, VG, EN 55011, EN 55013, EN 55015, EN 55022, MIL-Std-461	
Host option	PC software suite (Including 5 meters optical fiber, fiber optic converter and PC software)	

The specification of the conventional probes

Model	Type	Response of frequency	Range	Accuracy
EP0350	Isotropic electric field	80kHz~3.5GHz	0.2V/m~400V/m	±1dB
EP0650	Isotropic electric field	80kHz~6.5GHz	0.2V/m~720V/m	±1dB
EP0900	Isotropic electric field	100kHz~9GHz	0.3V/m~1kV/m	±1.5dB
EP2000	Isotropic electric field	5MHz~20GHz	0.6V/m~1.1kV/m	±1.5dB
EP6000	Isotropic electric field	100MHz~60GHz	3V/m~620V/m	±2dB
EHP150	Isotropic electric and magnetic field as one	1Hz~150kHz	Electric field: 0.01V/m~100kV/m Magnetic field: 0.5nT~10mT	±0.5dB
EHP400	Isotropic electric and magnetic field as one	1Hz~400kHz	Electric field: 0.1V/m~50kV/m Magnetic field: 1nT~5mT	±0.5dB

EHP low frequency electric and magnetic field as one probe series option: PC software suite (Including 10 meters optical fiber, fiber optic converter and PC software)

	Isotropic electric probe
	Isotropic electric and magnetic field as one probe

The specification of the unconventional probes

Model	Type	Response of frequency	Range	Accuracy
HP100	Isotropic magnetic field	DC	0~2T or 0~1mT	±1%
HP101	Isotropic magnetic field	1Hz~1MHz	1mT	±2%
CX10	Environment level ionizing radiation probe	15keV~7MeV detect X(γ) ray	Dose equivalent rate: 0.001~200μSv/h Absorbed dose rate: 0.001~150μGy/h	15%

	Isotropic magnetic probe
	Ionizing radiation scintillator probe

The trademark and product name in the file belong to Coliy Technology GmbH.

Contents in this file for reference only. The actual specification of the product is subject to the client's contract.

Revision 1, Published: NSF-English-01-06

