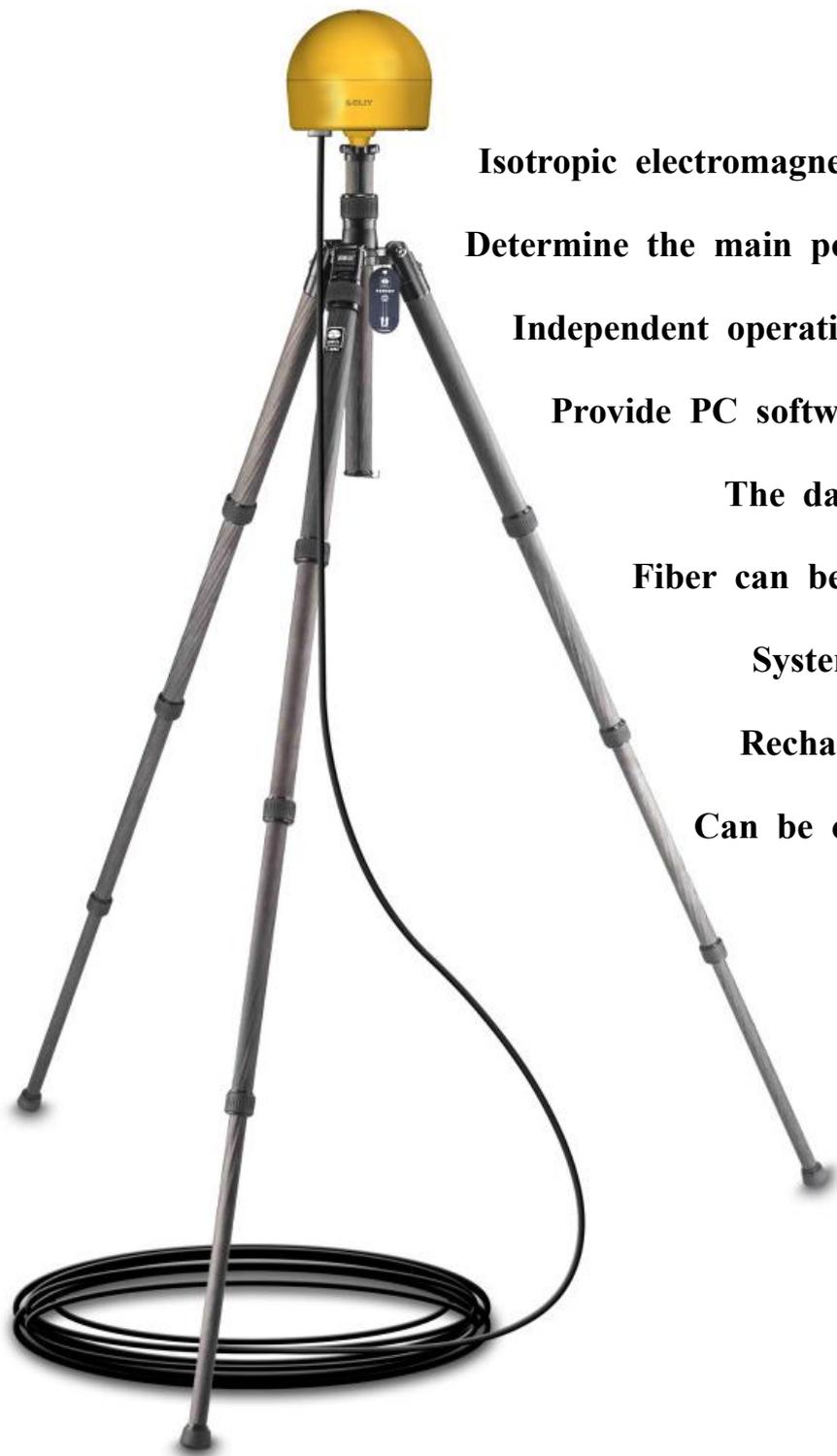


## Low Frequency Electromagnetic Field Analysis System EMS-150



**Isotropic electromagnetic field probe up to 150kHz**

**Determine the main pollutant source with spectrum**

**Independent operating mode and storage module**

**Provide PC software and fiber optic converter**

**The data can be saved permanently**

**Fiber can be customized up to 100meters**

**System can be remotely controlled**

**Rechargeable battery or DV power**

**Can be connected with the E300 host**

## Description

The problem of electromagnetic radiation and health has been paid attention to by human beings gradually with the electromagnetic wave used in human daily life more and more widely. There are potential risks under certain conditions of electric field and magnetic field with a series of electrical or electronic equipment assemblies, and the most interesting area is the generation of low frequency electromagnetic fields such as AC&DC high voltage transmission and transformation system, large motors, power distribution room, subway and so on. These areas are related with human life closely with discrete site, wide coverage and high electromagnetic field intensity. Coliy's low frequency electromagnetic field analysis system EMS-150 solves the problem of comprehensive and continuous monitoring perfectly which can't be solved by traditional field intensity meter.

The probe of low frequency electromagnetic field analysis system EMS-150 is integrated with the most advanced 3D data synchronization acquisition techniques to ensure the reliability of the data even at very low radiation level. Meanwhile, the measurement result isn't influenced by the direction of pollutant source attributed to isotropic electromagnetic field probe. The frequency response of the EMS-150 system is 1Hz~150kHz, the history data can be saved permanently in terminal through the software, and the probe memory can store a certain amount of data to ensure data integrity. The data can be monitored, transferred and analyzed through the system, users can establish the basic database of each region and consummates our country environmental electromagnetic radiation database system gradually to provide reference for the long-term variation of the level of electromagnetic radiation.

Each site of low frequency electromagnetic field analysis system EMS-150 is used independent operating mode and storage module, the parameters can be set by the users according to the real-time demand, which can be transmitted to the terminal automatically by the system through remotely controlled. The development of this function not only ensures the timeliness of the data, but also reduces the loss of manpower and material resources greatly.

The related equipment of low frequency electromagnetic field analysis system EMS-150 is simple and light, which is easy to install and move both indoor and outdoor. The test point can be repeatable choice and the system calibrates self after starting. The main pollutant source can be determined through the spectrum analysis function. The EMS-150 system is connected to the terminal by optical fiber ensuring the stability of the data, which can be customized up to 100 meters. The EMS-150 system can be connected with the E300 host as a portable display, the real-time value, maximum value, minimum value, average value, alarm threshold, spectrum, site NO. , etc. can be displayed on the E300 host interface.

## Application

Low frequency electromagnetic field analysis system EMS-150 is developed to detect low frequency electromagnetic field intensity, to form a comprehensive and continuous database in the field. The discrete site data can be collected through the system and be carried on the analysis comparison transversely and longitudinally, take timely measure for beyond the limits of the site to minimize the risk. The EMS-150 can be used to the following places:

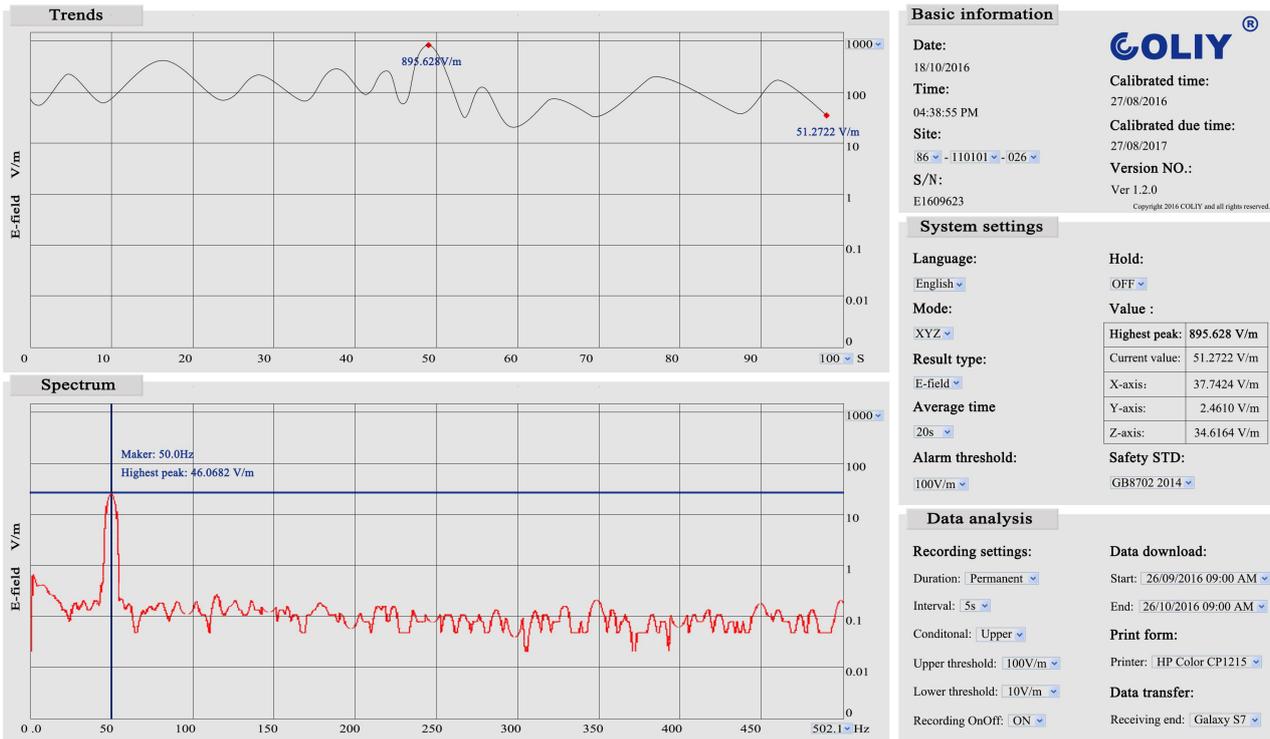
AC&DC high voltage power transmission and transformation system, large motors, generators, large scale manufacturing and processing plants, power distribution room, induction furnace, subway, tram, computer room, sensitive instrument room, hospital and other workplaces.

## Features

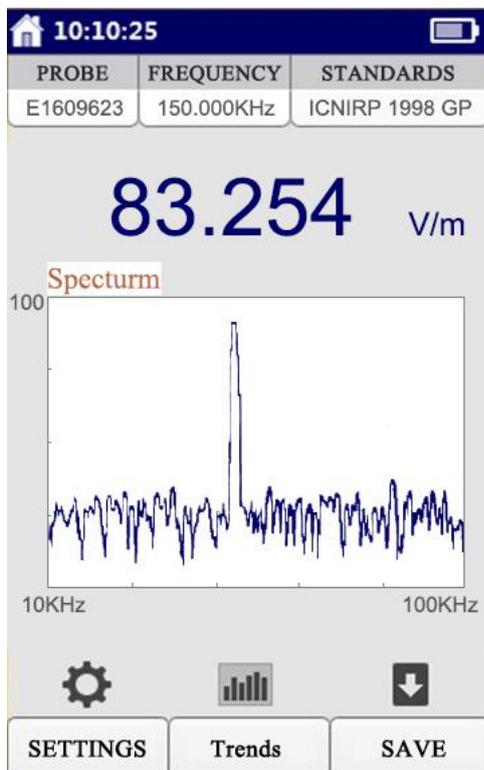
- ✧ Advanced 3D data synchronization acquisition techniques
- ✧ Isotropic electromagnetic field probe up to 150kHz
- ✧ The accuracy is  $\pm 0.5\text{dB}$
- ✧ The history data can be saved permanent by PC software
- ✧ The probe memory can store a certain amount of data to ensure data integrity
- ✧ Users can monitor, transfer and analyze the data through the system
- ✧ Independent operating mode and storage module
- ✧ The measurement parameters can be set defined
- ✧ System can be remote control and calibrate self after starting
- ✧ Spectrum analysis function optional
- ✧ Large capacity rechargeable battery or DC power supply
- ✧ Can be connected with the E300 host as a portable display
- ✧ The equipment is simple and light, and the test point can be repeatable choice
- ✧ Optical fiber link (can be customized up to 100 meters)

## Interface display

# Electromagnetic Field Analysis



Interface display of the PC software as shown above, basic information, system settings, data analysis, trends and spectrum can be display on the computer, the main pollutant source can be determined through the spectrum analysis function.



Each probe of the system EMS-150 not only can work independently, but also can be connected with the E300 host as a portable display. There are three kinds of mode such as standard, XYZ and spectrum mode, the measurement parameters can be set through the E300 host.

## Specification

|                           |   |
|---------------------------|---|
| Probe type                | Isotropic electric and magnetic field as one probe  |
| Technology                | 3D data synchronization acquisition techniques  |
| Response of frequency     | 1Hz~150kHz  |
| Range                     | Electric field: 0.01V/m ~100 kV/m<br>Magnetic field: 0.5nT~10mT   |
| Overload                  | Electric field: 200kV/m    Magnetic field: 20mT   |
| Span                      | 100Hz, 200Hz, 400kHz, 500Hz, 1kHz, 2kHz, 10kHz, 50kHz, 100kHz, 150kHz   |
| Software platform         | Can be installed in the computer of all kinds of systems  |
| Software interface module | Basic information: Date, Time, Site, S/N, Calibrated time, Calibrated due time, Version NO. , etc.<br>System settings: Language, Mode, Result type, Average time, Alarm threshold, Value, Safety STD, etc.<br>Data analysis: Duration, Interval, Conditional, Data download, Print, Data transfer, etc.<br>Trends: Curve, Max value, Current value, etc.<br>Spectrum: Spectrum curve, Max marking value, etc. |
| Result type mode          | Standard, XYZ, Spectrum   |
| Memory capacity           | The history data can be saved permanently by PC software;<br>The probe memory can store a certain amount of data to ensure data integrity   |
| Accuracy                  | ±0.5dB  |
| Linearity                 | ±0.2dB  |
| Interface                 | Optical fiber (standard 10 meters, can be customized up to 100 meters)  |
| Calibration               | Calibrate self after starting   |
| Power                     | Large capacity rechargeable battery or DC power supply  |
| Installation              | Both indoor and outdoor installation, test point can be repeatable choice   |
| Temperature               | Operating: -15 °C to +50 °C<br>Storage: -30 °C to +70°C   |
| Humidity                  | 5% ~ 85%, non-condensing  |
| Extended function         | Can be connected with the E300 host   |
| Product standard          | According to European standards: CISPR, VDE, MIL, VG, EN 55011, EN 55013, EN 55015, EN 55022, MIL-Std-461   |
| PC software suite         | Including fiber (standard 10 meters, can be customized), fiber optic converter and PC software  |

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