

Electric Field Analyzer System

7905A SpectruMate

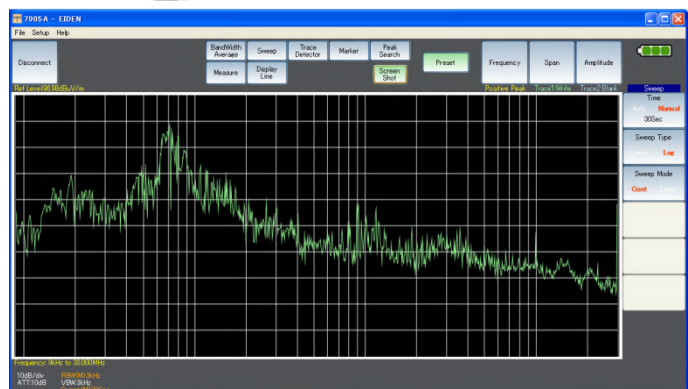
New release!

The **7905A SpectruMate** is a compact size electric antenna (The electric field analyzer system) that has the spectrum analyzer function. This instrument is most suitable to the radiation noise measurement of electric field from the system, such as the wireless power supply, that uses the frequency less than 30 MHz.

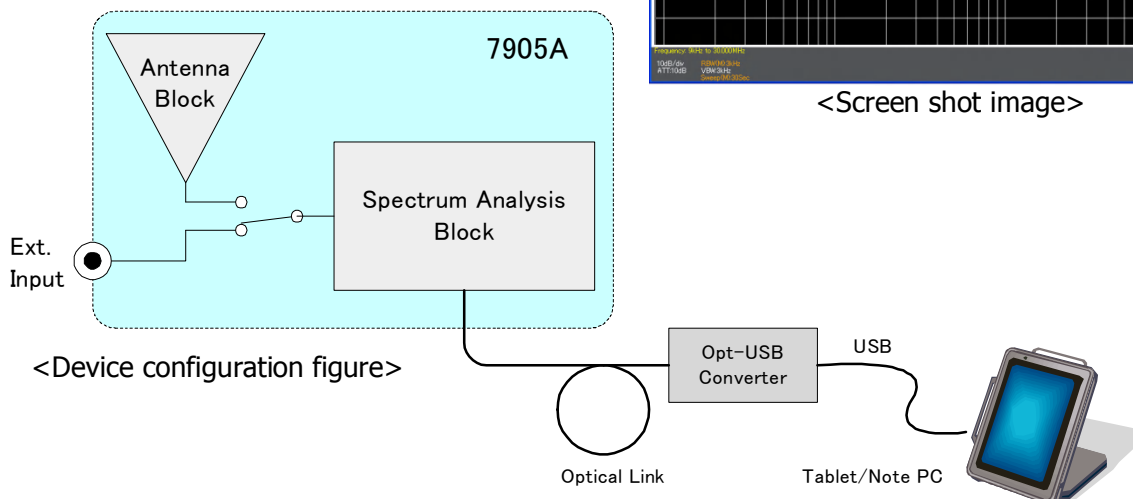


Features

- Wideband electric field antenna:
The range from 9-kHz to 30-MHz is covered.
- Small and light weight: Approximately 1 kg
- PC connection: Dedicated interface (USB conversion)
Without influence to measured electric/magnetic field
- Battery operation time: Approximately 5 hours (AA battery x 4)
- Noise level: -23 dBuV/m/Hz (typ)



<Screen shot image>



<Device configuration figure>

Specifications

Antenna part

Antenna factor: 16 dB/m typ
Antenna type: One axis (Monopole)

Spectrum analyzer part

Frequency Range: 9 kHz to 30 MHz
Span: Zero span, 2 kHz to 130 MHz (Linear),
3 kHz to 30 MHz (Log)
RBW: 1 kHz to 300 kHz (1-3 step), 220 Hz, 9 kHz,
120 kHz
VBW: 100 Hz to 300 kHz (1-3 step)
Reference frequency accuracy: ± 1 ppm

Amplitude (Ext input)

Reference level range: +20 to -60 dBm (0.1 dB step)
Accuracy (@1 MHz): ± 0.5 dB (@-3 dBm)
Unit: dBm, dBV, dBmV, dBuV, dBuV/m, dBuA/m,
dBmW/m², mW, mV, mW/m², mV/m, A/m, uT
(120nis used as the transformation coefficient of the
magnetic field.)
Noise level: -145 dBm/Hz (typ)
Frequency response (Flatness): ± 1 dB
Impedance: 50 ohm (SMA-type)
VSWR : ≤ 2.0
Maximum RF input: +24 dBm, 25 Vdc

Amplitude (Antenna input)

Reference level range: +143 to +63 dB dBuV/m (typ)
Accuracy (@1 MHz): ± 1 dB (@120 dBuV/m)
Unit: dBm, dBV, dBmV, dBuV, dBuV/m, dBuA/m,
dBmW/m², mW, mV, mW/m², mV/m, A/m, uT
(120nis used as the transformation coefficient of the
magnetic field.)
Noise level: -23 dBuV/m/Hz (typ)
Frequency response (Flatness): ± 2 dB
Electric field intensity
Upper limit of measurement range: +126 dBuV/m
(2V/m)
Rated absolute maximum: +140 dBuV/m (10V/m)

Sweep route

Sweep time: 100 ms to 30 s (1-3 step)
Detector mode: Positive peak, Negative peak, Sample,
Average

General ratings

Log: The time, the marker level and the power value are
recorded by interval of specified time from 1 to 60
seconds.
Memory: The trace, the device settings and the antenna
calibration files can be stored into a PC.
Optical connector: x1 (Dedicated interface)
Power source: AA battery x 4
Operating temperature: 0 to 50°C
Humidity: 85%RH
Storage temperature: -20 to 60°C
Dimension: 144 (Diameter) x 150 (Height) mm
(Main body only)
Weight: Approximately 1 kg (Excluding Battery)

Accessories

Instruction Manuals, Optical-USB convertor, Optical
cable, USB cable, USB-micro USB cable, PC software
(CD disk), Independent stand, Small tripod, AA battery x
4, battery charger



Ordering Information

- 7905A-001 Main body and all accessories (The PC is
not attached.)

• If calibration data are needed, an additional fee is needed.

• The specifications and the external view of this instrument described in this catalog may be changed for the improvement without prior notice.