

RF Field Analyzer System

SpectruMate FHA7902A



New release!

The **SpectruMate** is RF field analyzer system of compact size that consists of ultra broadband antenna (FHA7901A-001 and FHA7901A-002) and handy type spectrum analyzer (FHA7900A). This instrument has many convenient functions for measurements in fields and is the high-precision measuring instrument of efficient small and lightweight. It can measure EMI in the frequency ranges from 100 kHz to 30 MHz and from 30 to 1000 MHz, basing on the standard of CISPR16.



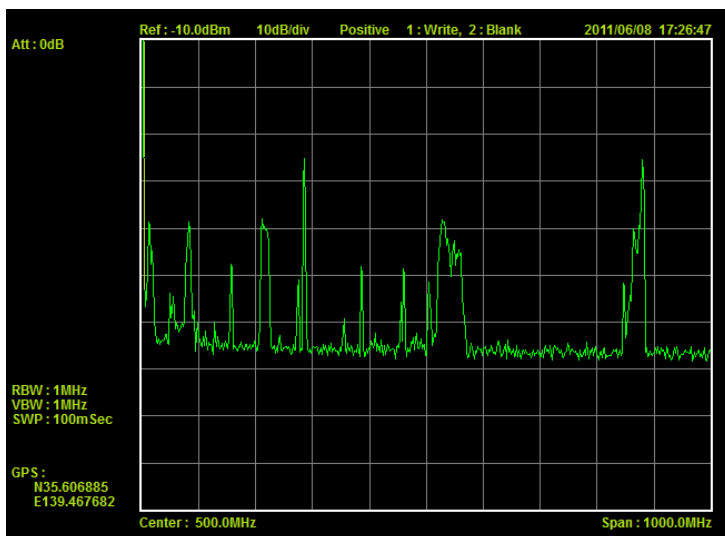
FHA7901A-002 (0.6kg)
[NVLAP standard cal.]



FHA7901A-001 (0.35kg)
[NVLAP standard cal.]



FHA7900A (1.5kg)



Screenshot

Key Features

- Ultra broadband antenna: 30kHz to 1GHz (2types)
- GPS function is equipped as standard.
(Position information of measurement points can be recorded.)
- Small and lightweight body: Antenna:0.35kg/0.6kg
Spectrum analyzer: 1.5kg
- Interface:
USB (For data transfer and instrument control)
SD memory card slot (For data save)
- Easy to read, 3.5-inch (320×240) color TFT display.
- 3.5 hour battery operation time.
- External power supply: AC adaptor attached,
USB (Bus power operation is not supported)
- Noise floor level : -140dBm/Hz (typ)
- Logging function: Logging of measuring data
(without PC)

Patent Pending

SpectruMate Leaflet(E) Ver1.1
July 2013

Key Specifications

FHA7901A-001 Broadband antenna

Frequency range: 30MHz to 1GHz
 Impedance: 50Ω
 Antenna factor: 18dB/m typ
 Antenna type: Monopole
 Power source: +5Vdc/45mA typ
 RF port: N (Female)
 DC port: HR10 (Hirose) 4pin
 Dimension: L=240mm (Diameter: Max100mm)
 Weight: Approx. 0.35kg

FHA7901A-002 Broadband antenna

Frequency range: 30kHz to 30MHz
 Impedance: 50Ω
 Antenna factor: 15dB/m typ
 Antenna type: Monopole
 Power source: +5Vdc/45mA typ
 RF port: N (Female)
 DC port: HR10 (Hirose) 4pin
 Dimension: L=290mm (Diameter: Max134mm)
 Weight: Approx. 0.6kg

FHA7900A Spectrum analyzer

Frequency

Range: 100kHz to 1GHz
 Span: 0, 200kHz to 1GHz (1-2-5 step)
 RBW: 3kHz to 1MHz (1-3 step), 9kHz, 120kHz
 VBW: 100Hz to 1MHz (1-3 step)
 Phase Noise: -90dBc/Hz @100kHz offset
 Ref accuracy: ±1ppm

Amplitude

Ref level range: +10 to -60dBm (0.1dB step)
 Level accuracy: ±1dB±1dot
 Unit: dBm, dBV, dBmV, dBuV, dBuV/m, dBuA/m, mW, mV, mW/m², mV/m
 Noise floor level: -140dBm/Hz (typ)
 Flatness: ±2dB±1dot
 Impedance: 50Ω (N-type)
 VSWR : ≤2.0
 Attenuator: 0 to 30dB (10dB step)
 Max input power: +24dBm, 25Vdc

Sweep

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

•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.

General

GPS : Support for GPS location (Standard equipment)
 Log: Time, GPS, Marker Level and Power are recorded to SD card by interval of specified time from 6 to 60 sec. (3sec step)
 Memory: SD card can store up to 256 memories of trace, device setting and antenna calibration files for each level in the directory tree.
 USB: USB Mini B x1 (Serial 115.2kbps)
 SD memory card slot: x1 (SDHC and SDXC are not supported)
 Antenna DC port: x1 (for antenna +5Vdc output)
 Power source
 Ext DC input: +12V (+10 to +14V)/7.5Wmax
 Integrated battery: NiMH (+4.8V/3.6Ah)
 AC adapter: 100 to 240Vac, 24Wmax
 Operating temperature: 0 to 50°C
 (0 to 35°C during battery charge)
 Humidity: 85%RH
 Storage temperature: -20 to 60°C
 Dimension: 130(W)×56(H) ×268(D)mm
 Weight: Approx. 1.5kg (include Battery)

Accessories

Instruction Manuals
 Utility software (CD disk)
 AC adapter
 USB cable
 Soft case



Ordering Information

SpectruMate

- FHA7902A-01 (FHA7900A & FHA7901A-001)
- FHA7902A-02 (FHA7900A & FHA7901A-002)
- FHA7902A-03 (FHA7900A & FHA7901A-001/-002)