

# Spectrum Analyzer

## Protek 7830

### Handheld Spectrum Analyzer Protek 7830 (2.9GHz)



#### ■ Applications

- Field wireless Equipment Installaton and Maintenance
- General field use for Communications Installation and Maintenance
- Cable Installation and Maintenance
- RFID Tag RF Strength Measurement
- Jammer(for hospital, theater and military) Performance Test
- Satellite Antenna Installation and maintenance
- Tapping, Hidden Camera Detection

#### ■ Features

- 100kHz to 2.9GHz measurement range
- Measures and demodulates W-FM /N-FM/ AM / SSB signals
- Sweep mode (Free Run, Single Run, Squelch Run)
- PLL tuning system for precise frequency tuning
- 100 Saves and loads for waveforms and settings
- Enhanced Accuracy for Signal Level
- Marker / Delta Marker / Squelch Adjustment Function
- Peak Search Function
- Marker To Center Function
- Channel Power Measurement Function
- RS-232 Interface
- User-friendly Icon Display

## ■ Specifications

|                       |                          |                                                                                          |
|-----------------------|--------------------------|------------------------------------------------------------------------------------------|
| Frequency             | Range                    | 100kHz to 2900MHz                                                                        |
|                       | Resolution               | 3.125KHz (Multiple of 3.125KHz)                                                          |
|                       | Accuracy                 | TXO: ±3PPM<br>Display: ±1.5PPM                                                           |
|                       | Modulation Bandwidth     | Wide FM: Apprx. 180kHz(-6dB)<br>Narrow FM: Apprx 12.5kHz/ AM / SSB: Apprx 2.4kHz (- 6dB) |
|                       | Step Range               | AM/SSB:2.5KHz fixed. FM : 6.25KHz                                                        |
|                       | Frequency Selection      | Start, Stop, Center span setup                                                           |
| Amplitude             | Measurement Range        | -20dBm to -110dBm                                                                        |
|                       | Average Noise Level      | Wide FM: -100dBm<br>Narrow FM / AM / SSB: -110dBm                                        |
|                       | Amplitude Units          | dBm, dBmV, dBuV                                                                          |
|                       | Reference Level Accuracy | Typical 1.5dB (@20 °C to 25 °C)                                                          |
|                       | Reference Level Ranges   | +20dBm to -90dBm                                                                         |
|                       | Log Scale                | 0.2 dB/DIV min. in 0.25 dB Steps (5 Display Division)                                    |
| Sweep                 | Internal Atten           | Max 35dB (Step : Min 1dB)                                                                |
|                       | Speed                    | 500msec to 2000msec                                                                      |
|                       | Trigger Source           | Narrow FM / Wide FM / AM / SSB                                                           |
|                       | Trigger Mode             | Free Run / Single Run / Continuous Wave / Squelch Run                                    |
|                       | Trigger Level            | TTL Level                                                                                |
| Memory                | Marker Modes             | Marker / Delta Marker / Peak Search / Marker to Center / Channel Power                   |
|                       | Trace Storage            | Max 100 Waveforms                                                                        |
| Display               | Setup Storage            | 100 States                                                                               |
|                       | Type                     | Mono STN LCD                                                                             |
|                       | Display Resolution       | 192 x 192 pixels                                                                         |
| Input                 | LCD BackLight            | ON /OFF / AUTO                                                                           |
|                       | RF Input Connector       | N Type Female, 50 ohms                                                                   |
| Frequency Counter     | Maximum Input Power      | Max +10dBm, 5V RMS                                                                       |
|                       | Range                    | 10MHz to 2900MHz                                                                         |
| General Specification | RF Input Connector       | BNC Type Female, 50 ohms (Standard)                                                      |
|                       | Operation Temperature    | 0 °C to 40 °C                                                                            |
|                       | Humidity                 | 35 RH to 85 RH                                                                           |
| Power                 | Storage Temperature      | 10 °C to 50 °C                                                                           |
|                       | Power Source             | AA Type Ni-MH Rechargeable Battery x 6pcs                                                |
|                       | Power Adaptor            | SMPS Type AC Adapter DC 12V<br>Car-adaptor DC 12V                                        |
| Dimension & Weight    | Auto Power               | OFF / 5sec / 10sec / 20sec / 30sec                                                       |
|                       | Size                     | 102(W) X 229(H) X 45(D) mm                                                               |
| Other                 | Weight                   | Aprx. 2.2lbm / 700grams (Except Antenna)                                                 |
|                       | Speaker                  | 0.5W into 8 ohms Speaker                                                                 |
|                       | Antenna                  | Dipole Antenna (Receive Only)                                                            |
|                       | RS-232 Interface         | 9600 bps, 19200 bps, 38400 bps, 57600 bps, and 115200 bps<br>8-pin MINI-DIN Connector    |

## ■ Standard Accessories

Antenna (Receive Only), AA Type Ni-MH Rechargeable Batteries (1.2 2,500mAH), Coaxial Cable, RS-232 Cable, Carrying Case, Carrying Strap, Earphone, Manual, Software for PC Application.

## ■ Optional Accessories

Matching Pad (75 to 50), F-BNC Adaptor, AC Adaptor, Car Adaptor, AA Type Ni-MH Batteries (1.2V 2,500mAH) Mini Printer Cable, Block Voltage Unit