

Bumble Bee-RFID



HANDHELD RUGGEDIZED SPECTRUM ANALYZER

2.4-2.5 GHz

SUPPORTS

RFID frequencies

IDENTIFIES

Wi-Fi frequencies

SCANS

ISM frequencies

ANALYZES

Bluetooth frequencies



& 860-960 MHz

BumbleBee-RFID is a rugged, calibrated spectrum analyzer all-in-one system. The handheld receiver measures the popular wireless RFID frequency bands 860-960 MHz & 2.4-2.5 GHz. **BumbleBee-RFID** allows users to scan, display and record multiple RF waveforms for network installation, coverage and interference analysis of RFID tags as well as other RF sources in the area. The color, touch-screen allows field engineers to tap on points of interest in any waveform and "zoom" in for further analysis. Advanced spectrum analysis features include 3 waveform, peak hold, peak search and user selectable power triggers. **BumbleBee-RFID** allows for realtime spectral analysis of many wireless standards including RFID, Wi-Fi & Bluetooth as well as unidentified RF interference such as microwaves and cordless phones. **BumbleBee-RFID** takes the power of sophisticated laboratory spectrum analyzers and puts it in user's hands.

BUMBLE BEE-EX FEATURES:

- ✦ 860-960 MHz & 2.4-2.5 GHz SPECTRUM ANALYSIS
- ✦ RFID, Wi-Fi, 802.11 & OTHER ISM FREQUENCIES
- ✦ COLOR, TOUCH-SCREEN INTERFACE
- ✦ 3 WAVEFORM TRACES
- ✦ PEAK HOLD / SEARCH
- ✦ PACKET / INTERFERENCE TRIGGERS
- ✦ WAVEFORM JPEG SNAPSHOTS
- ✦ NECTAR PC SPECTRUM ANALYSIS SOFTWARE (OPTIONAL)



Now you can have all the power of BumbleBee-RFID on your PC with Nectar™ spectrum analysis software

Bumble Bee-RFID

HANDHELD RUGGEDIZED SPECTRUM ANALYZER



Frequency:

Standards: RFID
Wi-Fi 802.11b/g
ISM Band

Span:

Resolution bandwidth: 50 kHz to 800 MHz
50 kHz – 1 MHz (50, 100, 300, 500, 1 MHz)
Automatic 802.11 preset bandwidths
Video bandwidth (smoothing): 100 kHz – 1 MHz (50 kHz steps)
Screen Averaging: 1 – 100 Averages
Reference Stability: ± 2.5 PPM
Sweep Time: 800 mSec (20 MHz span, 50 kHz resolution bandwidth)

Amplitude:

Average Noise Floor (No input): < -100 dBm (reference level -70 dBm)
Dynamic Range: > 40 dB
Level Accuracy: ± 1.5 dB (25 deg. C)
Max input (safe): $+ 0$ dBm
Max input (no saturation): $- 20$ dB
Reference level: -20 to -70 dBm (10 dB steps)

Display/Operating System/Memory:

Number of traces: 3 colors
Trace settings: Peak hold, screen average
Marker functions: Peak search, center frequency, left, right, delta
Screen shots saved to .jpg file
Display (iPAQ): see HP2795 specifications
Operating system (iPAQ): Windows® Mobile 5.0

Triggering:

Auto or Manual:
Packet/Interference Trigger: Trigger analyzer when input power meets or exceeds threshold (20 MHz span)
Trigger threshold: user settable in dBm.
Trigger delay: user settable in mS.

Input Connector: SMA Female, 50 Ω

Power:

Internal battery: (LI-PO), AC or DC
Run time (internal battery): > 3 hours
Re-charge time: < 1 hour

Physical Specifications:

Weight: 3 lbs.
Dimensions: 6"H x 4"W x 6"L



Optional 2.4 GHz



Optional 900 MHz



Optional 30 dB Attenuator



Optional 12V Power Inverter



Optional Logging Software



Mapping Software



RF Analysis Software