

# YELLOWJACKET®-B

## 802.11b Wi-Fi Analysis System

with removable  
HP iPAQ



**Yellowjacket®** is a wireless receiver module designed to work with HP's iPAQ® PocketPC® in sweeping, analyzing and optimizing 2.4 GHz Wi-Fi networks. The receiver measures all 14 DSSS network channels which operate on the **IEEE 802.11b** standard allowing the user to determine the AP (Access Point), PER (Packet Error Rate), SNR (Signal-to-Noise), Multipath (Ec/Io), Delay Spread, Channel Frequency Response, SSID and RSSI signal levels aiding in locating the hub and access points of neighboring WLANs. **Yellowjacket®** allows those familiar with the iPAQ's PocketPC® interface a unique advantage over "software only"

products currently available because **Yellowjacket®** functions as a complete WLAN analysis system combining the ubiquitous PocketPC® environment along with Berkeley's precision receiver technology.



HX2415  
i P A Q

Choose an  
HP iPAQ  
interface  
or supply  
your own.

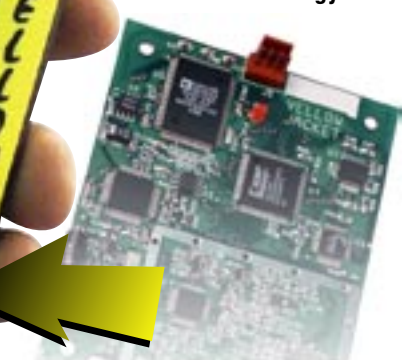


HX4700  
i P A Q

Yellowjacket shown with HP2415 model iPAQ



Berkeley's custom receiver demodulates and displays all 14 DSSS channels like a pocket-sized spectrum analyzer.



### FEATURES:

- Measure 2.4 GHz coverage for direct sequence (DSSS) WLANs (IF wideband 22 MHz) within the **IEEE 802.11b** standard
- Receive, filter and process DSSS studies all in Pocket PC®
- 64K color backlit display for real-time color-coded signal analysis
- Measures RSSI in true dBm with a calibrated receiver
- Removable HP iPAQ® PocketPC® PDA
- Measures Packet Error Rate; data rate percentage breakdowns Multipath and RSSI; narrow band & total channel power
- Complex Access Point / Station list analysis including WEP, Multipath, PER, Absolute Channel, Survey Sweep and SSID
- Connection (Hot Sync) to a PC via IRDA or USB
- Removable battery power (4 AA Ni-MH cells)
- UL and FCC approved and certified

### Yellowjacket Measurements:

- ✓ MAC
- ✓ SSID
- ✓ PER
- ✓ Total Channel Power
- ✓ Multipath
- ✓ Narrowband RSSI
- ✓ WEP Detection
- ✓ Survey Sweep
- ✓ Signal-to-Noise Ratio
- ✓ Antenna Alignment
- ✓ Channel Frequency Response



Yellowjacket includes a carrying case, stylus, AC adaptor, 8 AA Ni-MH batteries, fast-charger, USB cradle and iPAQ PDA with expansion pack sled.

Call us today for more information:  
(732) 548-3737 / Fax: (732) 548-3404  
Internet: [www.bvsystems.com](http://www.bvsystems.com)  
E-mail: [info@bvsystems.com](mailto:info@bvsystems.com)

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wireless products **BERKELEY  
VARITRONICS  
SYSTEMS**

# YELLOWJACKET<sup>®</sup>-B



## 802.11b Wi-Fi Analysis System

### BANDS SUPPORTED

ISM: 2.400-2.495 GHz

### RF SENSITIVITY (Wide Band)

-20 to -90 dBm

### RSSI MEASUREMENT (Narrow Band)

-30 to -90 dBm @ 343.75 kHz resolution bandwidth

### TUNING INCREMENTS

Tunes 11 USA channels & 3 international channels

### PACKET PREAMBLE DEMODULATOR and ANALYZER:

Multipath Measurement and Graphical Display

### CORRELATED POWER MEASUREMENTS:

Correlated Power (dBm)

**RATIO**  
-30 dBm : -100 dBm

Correlated Power to Total Power Ec/Io (dB)

0 dB : -10 dB

Total Channel Power Measurement

-20 dBm : -90 dBm

### RECEIVER GENERAL SPECIFICATIONS

IF Bandwidth:

Wideband 22 MHz

Stability:

± 2.5 PPM Temp range 32° to 120 F°

Antenna:

SMA Female 50 ohm

Controls:

iPAQ PocketPC PDA

Warm Up Time:

< 3 minutes

Power:

Internal battery power (4 AA Ni-MH batteries in receiver)

Weight:

3 lbs.

Dimensions:

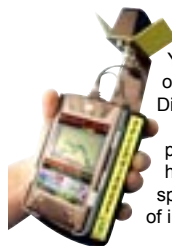
2" H x 4" W x 6" L (water resistant, high impact ABS plastic case)



# Hive™



Yellowjacket™ output data supports Microsoft Excel spreadsheets as well as Berkeley's own Hive™ Real-time Indoor/Outdoor Mapping solution on iPAQ PocketPC®. No GPS required.



Yellowjacket's optional Direction Finding Antenna pin-points WLAN hackers and specific sources of interference.



### YELLOWJACKET FEATURES:

#### SPECTRUM MODE:

- Full spectrum (14 channel) sweep
- Single channel zoom
- Peak Search and Hold
- 3 distinct waveform signal traces

#### AP ANALYSIS:

- Survey sweep of channels for all APs
- "Q" Factor signal strength quality meter
- Individual channel analysis of APs or STAs
- Absolute channel
- W.I.S.P. antenna alignment
- Signal-to-Noise Ratios
- WEP detection
- RSSI for each AP/STA in true dBm
- Multipath in chips and nanoseconds
- PER breakdown/usage for 1, 2, 5.5 and 11 Mbit/Sec.
- "Geiger Mode" for direction finding individual AP/STA

#### NETWORK SECURITY:

- Authorize or Unauthorize up to 1000 MAC addresses
- Generate valid AP list automatically
- Upload AP list from PC
- Flag invalid APs as "suspect"