

# YELLOWJACKET™-A

## 802.11a Wi-Fi Analysis System



**Yellowjacket™** is a wireless receiver module designed to work with Compaq's iPAQ® PDA in sweeping, analyzing and optimizing 5 GHz Wireless Local Area Networks. The receiver measures 8 OFDM network channels which operate on the **IEEE 802.11a** standard allowing the user to determine the AP's MAC address, SSID and RSSI signal levels for locating and optimizing access points of neighboring WLANs. **Yellowjacket™** 802.11a system uses a custom receiver, custom software and interfaces with an iPAQ giving **Yellowjacket™** the distinction of being the only true RF spectrum analysis and direction finding tool accurate to within 1 dB. Berkeley's calibrated receiver sweeps and measures all RF energy in the 5 GHz range as well as each of the 8 OFDM channels for detailed network inspection of any nearby 802.11a AP. **Yellowjacket's** ability to see the "whole picture" makes it ideal for measuring and pinpointing wireless interference and hackers that plague so many 802.11a WISPs and Hotspots.



# 802.11a

### FEATURES:

- Measure 5 GHz coverage for (OFDM) WLANs via custom, calibrated receiver all within the **IEEE 802.11a** standard
- Receive, filter and process OFDM studies all in PocketPC®
- 64K color backlit display for real-time color-coded signal analysis
- Touch screen, Windows® PDA-like interface using a stylus pen
- Removable HP iPAQ® PocketPC®
- Measures RSSI (narrow band & total channel power)
- Complex Access Point Analysis including RSSI, Absolute Channel, Survey Sweep and SSID
- FER (system-wide)
- JPEG snapshot any screen instantly for later analysis
- Connection (Hot Sync) to a PC via IRDA or USB
- Removable battery power (4 AA Ni-MH cells)

### Yellowjacket Measurements:

- ✓ MAC
- ✓ SSID
- ✓ Total Channel Power
- ✓ Narrowband RSSI
- ✓ Survey Sweep
- ✓ AP Manufacturer's ID



Yellowjacket 802.11a scans and displays all APs listing them by channel, MAC, SSID and RSSI.

**Berkeley Varitronics Systems**  
255 Liberty Street, Metuchen, NJ 08840  
(732) 548-3737 / Fax: (732) 548-3404  
[www.bvsystems.com](http://www.bvsystems.com)



# YELLOWJACKET™-A



## 802.11a W-LAN Analysis System

### BANDS SUPPORTED

U-NII lower band (5.180 - 5.240 GHz) (channel numbers 36,40,44,48)  
U-NII lower band (5.260 - 5.320 GHz) (channel numbers 52,56,60,64)  
-20 to -90 dBm  
-30 to -90 dBm @ 156 kHz resolution bandwidth  
Tunes 8 channels (36,40,44,48,52,56,60,64)

### RF SENSITIVITY (Wide Band)

### RSSI MEASUREMENT (Narrow Band)

### TUNING INCREMENTS

### RECEIVER GENERAL SPECIFICATIONS

IF Bandwidth:

Wideband 20 MHz

Stability:

± 2.5 PPM Temp range 32 to 120 degrees

Antenna:

SMA Female 50 ohm

Power:

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

Weight:

3 lbs.

Dimensions:

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

Runtime:

> 3 hours

Recharge Time:

< 1 hour

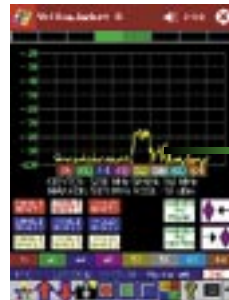


# Hive™

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 pinpoints WLAN hackers and specific sources of interference.



### YELLOWJACKET FEATURES:

#### SPECTRUM MODE:

- Full spectrum (8 channel) sweep
- Single channel zoom
- Peak Search and Hold
- 3 distinct waveform signal traces

#### AP ANALYSIS:

- Survey sweep of channels for all APs
- Individual channel analysis of APs or STAs
- Absolute channel
- SSID
- AP manufacturer's ID
- RSSI for each AP in true dBm
- "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"