



## Major Wireless indoor & outdoor Solution Figure & Products Specification

# IEEE 802-- 300mW Rugged Access Point/Bridge



## High Power with Wireless Tamper and Weather Resistant Case

The 802.n compliant Rugged AP is designed for distributed wireless deployment in hotels, apartment buildings, outdoor, or industrial applications. It is an extremely powerful **Rugged Access Point, with up to**

**300 mWatt transmit output** and industry standard Power over Ethernet. Ideal for indoor or outdoor applications

where industrial hardened equipment is required, we use a NEMA style enclosure, lockable to the wall or ceiling, and UL2043 rated for use in plenums. The Rugged AP can act as an Access Point, Bridge repeater, AP Client, or combination Access Point and Bridge repeater. Pricing for the AP is more cost effective than ever before, dramatically lowering your infrastructure costs, and increasing your Return on Investment.



### Hardware Features

The Rugged 300mW comes with an industry standard N-bulkhead connector so you can use a wide assortment of the best antennas available. Your backbone Ethernet cable connects to the 300mW through a moisture-proof gland and the entire unit is sealed with a heavy-duty gasket. Thus the unit is entirely sealed from the harshest elements and is suitable for indoor or outdoor applications.

The 300mW supports IEEE 802.3af 48Volt Power over Ethernet. It uses external *replaceable antennas* as well as *Transmit Power control*, enabling it to be used in a wide variety of special applications where the wireless output needs to be controlled for the environment. Special high-gain, omni-directional, directional, or Yagi antennas can be attached to the unit using standard N-type cabling.

### User Authentication

#### Secure authentication based on industry standards

The AP incorporates 802.N/Radius-based authentication features that interoperate with a back-office Radius server to provide authentication of each user.

802.N-based authentication means a AP is compatible with a wide variety of shared usage and public access applications. In addition, the 300mW can authenticate users based on their MAC address if desired.



## Security and Management

### *Highly secure and manageable*

In addition to Radius-based and MAC-based authentication in the Advanced Version, the 300mW supports the 64-bit and 128-bit Wireless Encryption Protocol, WPA/WPA2, and disabling of SSIDs.

The 300mW is easy for administrators to setup through Web-based management, or our Windows-based network manager. Additionally, management can be done via SNMP V 1, V 2, 802.x and 802.1d MIBs. It is UPnP-enabled and supports remote firmware upgrades.

## Extended Network Range

### *Repeater functionality*

The 300mW is able to operate as a repeater in addition to an access point, allowing it to communicate with other compatible AP/routers to form a Wireless Distribution System. This greatly extends the reach of the wireless network. Using directional antenna and the unit's powerful 300 mW radio, **a range of up to 15 miles is possible**. Aligning directional antennas is easy using built-in antenna alignment assistance. Up to six WDS links can be established from a single unit.

### *Client mode*

Operators can be extend the network even further by configuring the Rugged AP as a client device, compatible with any wireless compliant Access Point. 300mW client mode includes RSSI for link and antenna position monitoring as well as built-in site survey capability.

## Compatibility

The 300mW is fully compatible with the FCC standard, ensures the usability with any wireless compatible wireless equipped device. 300mW is the fastest growing standard for Internet access and is supported on a vast number of PCs today.



## **Technical Specifications**

### **Wireless**

- IEEE 802.n
- 300 mWatt (b mode) and 100 mWatt (g mode) transmit power at N-connector
- Transmit power control
- Frequency band: 2 - 5.8 GHz
- Media Access Protocol: CSMA/CA with ACK
- Data Rates: OFDM@54Mbps, CCK@11/5.5Mbps, QPSK@2Mbps and DBSK@1Mbps
- AP Range: 2000 meters line of sight (client dependent)
- WDS Range: 20,000 meters line of sight (antenna dependent)
- 87 dBm - 81 dBm receive sensitivity b mode
- 86 dBm – 68 dBm receive sensitivity g mode

### **Networking**

- DHCP Client and Server
- 6 WDS repeater links
- AP client mode
- 802.1d Bridging functionality
- UPnP

### **Security**

- MAC based access control
- 64/128 bit RC4 WEP
- WPA, WPA2

### **Management**

- Web-based management
- Antenna alignment and RSSI monitoring
- Web-based or TFTP firmware upgrade
- System logging (local or remote)
- SNMP v1/v2, MIB II with traps, 802.n, 802.1d MIBs
- Telnet

### **Interfaces**

- 1 10/100M Ethernet LAN port

### **Operating Environment**

- UL 2043 Plenum rated
- NEMA and IP 68 rated for outdoor operation
- Operating Temperature: -20 to 70 C
- Storage Temperature: -20 to 70 C
- Humidity: Max. 95% non-condensing

### **Electrical**

- 802.3af 48 Volt Power Over Ethernet
- AC Input: 100 – 240 VAC, 50/60 Hz, 0.35A; Output: 5V, 2.5A

### **Regulatory Approvals**

- FCC part 15 Class B, VCCI Class B, CE Mark, UL

### **Advanced Firmware Features included**

- 802.1x Port-based Network Access Control (EAP-MD5, EAP-TLS)
- Wireless Protected Access (WPA)
- AP load balancing
- Wireless Client Isolation
- Association Control

### **Warranty**

- One year parts and labor with the normal conditional use