SuperAP™ 500 DR   Rugged Access Point/Bridge

Dual Radio Wi-Fi with Tamper and Weather Resistant Case

ValuePoint™ Networks 802.11b compliant SuperAP 500 is designed for distributed Wi-Fi deployment in a hotel, apartment building, airport, or other public venue. It is an extremely **Rugged Access Point, with two (2) Radios with up to 285 mWatt transmit output each 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 SuperAP 500 DR can act as an Access Point, Bridge repeater, or combination Access Point and Bridge repeater. Pricing for the 500 DR is more cost effective than ever before, dramatically lowering your infrastructure costs, and increasing your Return on Investment.

Hardware Features

The SuperAP 500 DR comes with two (2) industry standard female N-bulkhead connectors so you can use a wide assortment of the best antennas available.   Your backbone Ethernet cable connects to the AP through a moisture-proof gland and the entire unit is sealed with a heavy-duty gasket. The unit is entirely sealed from the harshest elements outdoors, tampering indoors, and is suitable for all applications.

Each radio on the 500 DR is separately adjustable up to 285 mWatt output with its own channel setting, SSID, and encryption. The Dual Radio configuration is especially useful when attached to *directional antennas* to extend network range or act as a wireless repeater.

The SuperAP 500 DR 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 500 DR incorporates 802.1x/Radius–based authentication features that interoperate with a back-office Radius server to provide authentication of each user. Radius-based authentication means a SuperAP 500 DR is compatible with a wide variety of shared usage and public access applications. In addition, the 500 DR 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 500 DR supports the 64-bit and 128-bit Wireless Encryption Protocol (WEP), Wireless Protected Access (WPA), Static WPA-PSK, and disabling of SSID broadcast. Specific packet filtering by Ethernet type, protocol, or port is also supported.

The 500 DR is easy for administrators to setup through Web-based management, or our Windows-based network manager. Additionally, management can be done via SNMP v1, v2c, 802.1x and 802.1d MIBs. It is UPnP-enabled and supports remote firmware upgrades via TFTP or HTTP file-based upload.

Extended Network Range

Repeater functionality
The 500 DR 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 285 mW radio, a range of 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.

Compatibility

Wi-Fi
The 500 DR is fully compatible with the Wi-Fi standard, ensures the usability with any Wi-Fi compatible wireless equipped device. Wi-Fi is the fastest growing standard for Internet access and is supported on a vast number of PCs today.

About ValuePoint Networks

ValuePoint is a manufacturer of Wi-Fi products for service providers, small and medium sized businesses, and the shared access market. ValuePoint's products are designed for the unique needs of Service Providers, Wireless ISPs, Billing Providers, and Venue Operators in the burgeoning mobile access space. This includes Airports, Hotels, Multi-Tenant Units, Multi-Dwelling Units, Pay Telephones, and Storefronts. For more information on ValuePoint's Rugged Access Points and Wireless Gateways, please visit us online.
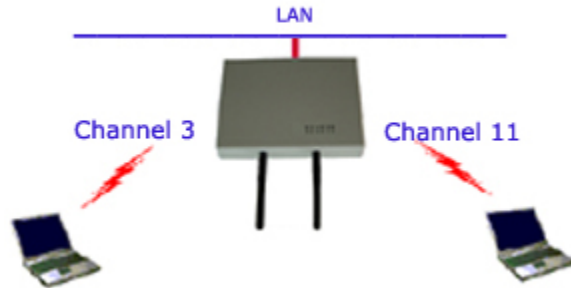
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Dual Radio Usage Scenarios

Dual AP

LAN

Channel 3   Channel 11

Bridge Repeater

WDS Link   WDS Link

AP Bridge

WDS Link

Technical Specifications

Wireless – Each Radio
- IEEE 802.11b
- Frequency band: 2.4-2.4835GHz
- Modulation Techniques: DSSS (CCK, DQPSK, DBPSK)
- Media Access Protocol: CSMA/CA with ACK
- Data Rate: 11Mbps with fallback rates of 5.5, 2, and 1M bps
- AP Range: 2000m, 6600ft line of sight (client dependent)
- WDS Range: 20,000m, 66,000ft line of sight (antenna dependent)
- 285 mWatt transmit power with Transmit power control
- 95 dBm - 89 dBm receiver sensitivity @FER = .08

Networking
- IEEE 802.3u 10/100BaseTX for Ethernet LAN
- DHCP Client and Server
- Static DHCP mappings
- 802.1d Bridging functionality
- UPnP
- Up to 6 WDS Repeater links per radio, 12 total

Security
- 802.1x RADIUS based security
- MAC based access control
- 64/128 bit RC4 WEP
- WPA, WPA-PSK

Management
- Web-based management
- Wireless Network Manager Application for Windows
- System logging
- SNMP v1/v2
- MIB II with traps, 802.1x, 802.1d MIBs

Interfaces
- 1 10/100M Ethernet LAN port

Compatibility
- Works with any Wi-Fi certified interfaces

Operating Environment
- UL 2043 Plenum rated
- NEMA and IP 68 rated for outdoor operation
- Operating Temperature: -20 to 70 C, -4 to 158 F
- 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 Features
- Link Integrity
- Association Control
- Wireless Client Isolation
- AP load balancing

Warranty
- 30 days satisfaction guaranteed
- One year parts and labor