

## SuperAP® 500 IA-12 DR

## Rugged AP/Bridge

### High Power Wi-Fi with Dual Integrated Directional Antennas

ValuePoint™ Networks' SuperAP 500IA-12 DR is designed for **indoor/outdoor** Wi-Fi deployments in hotels, apartment buildings, outdoor, or industrial applications. It is an Access Point, with dual adjustable **285mW** radio outputs, and 2 entirely enclosed 12 dBi Flat Panel Antennas. **Total output is up to 36 dBi per radio.** This unit is packaged in the same compact form factor as the SuperAP, available with a **side mount**, perfect for mounting at the end of hallways, above ceilings, or on the outside of a building. The SuperAP 500IA can act as a Dual Access Point, Bridge repeater, or an AP Repeater. Pricing for the 500IA-12 DR is more cost effective than ever before, dramatically lowering your infrastructure costs, and increasing your Return on Investment.



### Hardware Features

The SuperAP 500IA-12 DR comes with 2 versatile integrated flat-panel 12 dBi 120 degree directional antennas and a multi-position secure bracket. Your backbone Ethernet cable connects to the AP through a moisture-proof gland and the entire unit is sealed.

The 500IA-12 DR supports **IEEE 802.3af 48Volt Power over Ethernet**. It uses *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.

### User Authentication

#### Secure authentication based on industry standards

The 500IA-12 DR Advanced Version 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 500IA-12 DR is compatible with a wide variety of shared usage and public access applications.

In addition, the 500IA-12 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 500IA-12 DR supports the 64-bit and 128-bit Wireless Encryption Protocol, and disabling of SSIDs.

The 500IA-12 DR 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, 802.1x and 802.1d MIBs. It is UPnP-enabled and supports remote firmware upgrades.

## **Extended Network Range**

### **Repeater functionality**

The 500IA-12 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. With its built-in antenna and powerful 285 mW radio, a range of 10 miles is possible. Aligning directional antennas is easy using built-in antenna alignment assistance. Up to six WDS links can be established per radio.

## **Compatibility**

### **Wi-Fi**

The 500 IA-12 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**

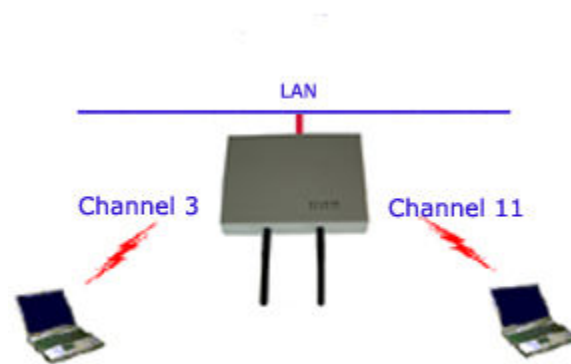
ValuePoint Networks is the foremost manufacturer of price leading Gateway Controllers, Rugged Access Points, and outdoor Mesh gear.

ValuePoint products are used in Hospitality, MTU/MDU, industrial, WISP, outdoor, hotspot, municipal, and enterprise applications. Using ValuePoint gear, you can light up more for less, reduce your capital expenditures, and improve your Return on Investment.

[www.valuepointnet.com](http://www.valuepointnet.com)

### Dual Radio Usage Scenarios

#### Dual AP



#### Bridge Repeater



#### AP Bridge



## Technical Specifications

### Access Point Specification

#### Wireless

- 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, 1M bps
- AP Range: 2000m, 6600ft line of sight (client dependent)
- WDS Range: 15,000m, 49,000ft line of sight
- 285 mWatt transmit power with Transmit power control
- 95 dBm - 89 dBm receiver sensitivity @FER = .08

#### Networking

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

#### Security

- MAC based access control
- 64/128 bit RC4 WEP

#### 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, 802.1x, 802.1d MIBs
- Telnet

#### Interfaces

- 1 10/100M Ethernet LAN port

#### Compatibility

- Works with any Wi-Fi certified interfaces

#### Operating Environment

- Operating Temperature: -20 to 70 C, -4 to 158 F
- Storage Temperature: -20 to 70 C, -4 to 158 F
- Humidity: Max. 95% non-condensing
- 10.5 x 6 x 6 In. / 3.2 Lbs.

#### Electrical

- 802.3af 48 Volt Power Over Ethernet

#### Regulatory Approvals

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

#### Advanced Features

- 802.1x Network Access Control (EAP-MD5, EAP-TLS)

- Wireless Protected Access (WPA-PSK)
- AP load balancing
- Wireless Client Isolation
- Association Control

### Antenna Specification

**Type:** Panel antenna

**Linear:** V or H

**Frequency:** 2400-2483.5MHz

**Impedance:** 50 ohm

**Antenna Pattern:** 120 Degree H-Plane on opposing sides (240 Degree total)

**VSWR:**  $\leq 2.0$

**Gain:** 12 dBi

**Power handling:** 10 Watt

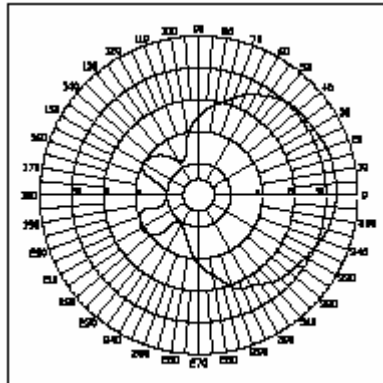
**Weight:** 400g, 11.1oz(include swivel base).

**Operation temp:** -30 to 60 C, -22 to 140 F

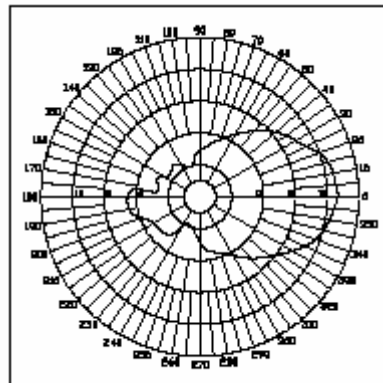
**Material:**

- Cover & Base: Injection ABS
- Mount: Stainless steel, Electro-plating

H-Plane (each direction)



E-Plane (each direction)





**Warranty**

One year parts and labor  
30 day satisfaction guaranteed