

VP1200/VP1210 Vivato Indoor & Outdoor Wi-Fi Base Stations



VP1200/VP1210 Vivato Indoor & Outdoor Wi-Fi Base Stations

Vivato 802.11b Wi-Fi Base Stations bring extended coverage and smart antenna technology to Wi-Fi networks. Install the VP1200 Indoor Wi-Fi Base Station on a wall or in a corner to provide coverage for an entire floor. Install the ruggedized VP1210 Outdoor Wi-Fi Base Station on a tower or rooftop to provide coverage for an entire building (outdoor to indoor) or to large outdoor venues (outdoor to outdoor) such as ports, campuses and stadiums. Vivato's innovative Wi-Fi Base Stations enable a new type of Wi-Fi deployment with one manageable Wi-Fi Base Station replacing many conventional access points, resulting in a system that is less expensive to install, manage and secure.

Vivato Wi-Fi Base Stations combine PacketSteering™ technology with a phased-array antenna to create directed, narrow beams of Wi-Fi transmissions allowing extended coverage to standard 802.11b devices on a packet-by-packet basis.

VP1200/VP1210 both support advanced security and management features.

- Security: WEP, 802.1x, Inter-client communication filtering (ICCF), VLANs, Rogue AP Detection (RAPD) and built-in hardware support (AES) for 802.11i.
- Management: simple device configuration, monitoring and upgrade capabilities, either locally or remotely, through SNMP, Syslog, HTTPS, or SSH.

Use the VP1200/VP1210 to provide a comprehensive Wi-Fi access and backhaul solution to Vivato devices and to standard Wi-Fi clients. Each narrow beam provides single- or dual-mode operation. In single-mode, a beam can operate as a dedicated wireless-to-wireless bridge, while other beams provide dedicated wireless access to clients. In dual-mode, all beams support both wireless bridging and client access simultaneously.

By reducing the number of devices and their associated installation costs, Vivato Wi-Fi Base Stations enable IT and network managers to provide Wi-Fi where it's needed at an affordable price.



VP1200
Vivato Indoor Wi-Fi Base Station

WIRELESS

PHY and MAC standard

IEEE 802.11b

Supported Data Rates

802.11b: 1, 2, 5.5, 11Mbps, auto-rate fallback

Coverage Pattern

100° horizontal and 12° vertical field of view

Antenna

Integrated Phased Array, 25 dBi gain

EIRP

44 dBm; 25W

Frequency Band

2.4-2.483 GHz

Operating Channels

IEEE 802.11b North America Channel Set (1-11)

WLAN Architecture

IEEE 802.11 Infrastructure – ESS
Wireless Distribution System (WDS)

Receive Sensitivity

1 Mbps: -95 dBm
2 Mbps: -92 dBm
5.5 Mbps: -89 dBm
11 Mbps: -86 dBm

Indoor Uplink Range

Mixed Office

*VP1200 @ 85% coverage, 3.0 path loss coefficient,
typical 802.11b 17dBm client*

11 Mbps up to 410 meters/448 yards
5.5 Mbps up to 520 meters/569 yards
2 Mbps up to 650 meters/711 yards
1 Mbps up to 820 meters/897 yards

Outdoor Uplink Range

Outdoor to Outdoor

*VP1210 @ 66ft (20m), 100mW client with 2.2dBi
antenna at 5ft (1.5m)*

11 Mbps up to 4.2 kilometers/2.61 miles
5.5 Mbps up to 5.1 kilometers/3.17 miles
2 Mbps up to 6.0 kilometers/3.73 miles
1 Mbps up to 7.2 kilometers/4.47 miles

Outdoor Range

Panel to Panel

Up to 50 kilometers/31.07 miles

Users per base station

Up to 100 simultaneous users/3,315 associated

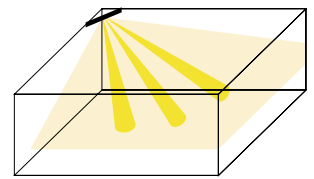
WIRED

Network Interfaces

2 - IEEE 802.3 auto-sensing 10/100BaseT ports
2 - Gigabit Ethernet (GbE)

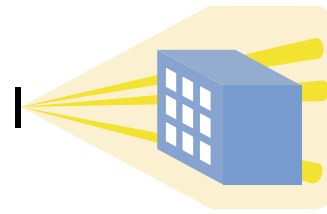
RS-232

Serial port local console management

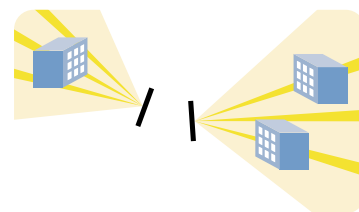


INDOOR DEPLOYMENT

Corner Mount



OUTDOOR DEPLOYMENT



CAMPUS DEPLOYMENT

SECURITY

Static and Dynamic WEP Encryption

40 and 104-bit (RC4) encryption

802.1x

EAP-TLS
EAP-TTLS
PEAP

ICCF

Inter-client communication filtering

Vivato Rogue AP Detection (RAPD)

Scan for and report detected APs
on all channels

Remote Management

HTTPS
SSH
SNMP (v1, v2c, v3)



MONITORING AND MIB SUPPORT

GUI

VivatoVision
Web user interface

File Management

SCP
TFTP

MIBs

RFC 1213
RFC 1493 Bridge
Generic and Enterprise Specific Traps
IEEE 802.11
IEEE 802.1x

Vivato Enterprise MIB Extensions

Associated MAC addresses with signal
strength, noise level, direction of arrival
Diagnostics support
VLAN policies
RAPD

Remote Logging

SNMP Trap Support
Remote and Local Syslog

LAYER 3 FEATURES

Network Address Translation (NAT RFC 3022)

DHCP server
DHCP client

Routing Protocol

IP Gateway
Static routes

Wi-Fi WHERE YOU [NEED] IT

LAYER 2 SWITCHING

802.1D bridging
(wired-wired, wired-wireless)

STP (loop detection, correction and resiliency)

Bridge support to conventional access points using WDS

Authentication-based VLANs

User placed into a VLAN via 802.1x or static MAC address assignment

802.1Q VLAN support

Full tag range supported
Independent VLAN learning



DESIGN

Mounting Options

Indoor Wi-Fi Base Station

Flat wall-mount brackets included
Optional corner-mount and tilt brackets available to order

Outdoor Wi-Fi Base Station

Mounting points are preinstalled for variable mounting options
Optional tower and wall mount kits available

Colors

Optional dress cover blends in with most indoor environments

White – optional radome colors available

GENERAL PRODUCT SPECIFICATIONS

Dimensions

Indoor Wi-Fi Base Station

1.20m x 0.63m x 7.6cm (WxHxD)
48 in. x 25 in. x 3 in. (WxHxD)

Outdoor Wi-Fi Base Station

1.18m x 1.01m x 14.08cm (WxHxD)
46.57 in. x 39.86 in. x 5.544 in. (WxHxD)

Weight

19.1kg (42 pounds)

36.3kg (80 pounds)

Environmental

Operating temperature:
32° to 122°F (0° to 50°C)
Humidity: 10 to 90% (non-condensing)

Operating temperature:
-40° to 115°F (-40° to 46°C) plus full solar load
(Tested per GR-487 Section 3.26)

Input Power

100-240VAC, 50-60 Hz

110VAC, 50-60 Hz

Certifications

CSA/CE, IEC
FCC Part 15
FCC 47 CFR Part 15, Class B USA
IC RSS-210

CSA/CE, IEC
FCC Part 15
FCC 47 CFR Part 15, Class B USA
IC RSS-210

Compliance

Operates license-free under FCC Part 15 and complies as a Class B computing device and intentional radiator; complies with DOC regulations

Operates license-free under FCC Part 15 and complies as a Class B computing device and intentional radiator; complies with DOC regulations

EMI and Susceptibility

FCC Part 15.107 and 15.109
ICES-003 (Canada)

FCC Part 15.107 and 15.109
ICES-003 (Canada)

Warranty

1 year limited warranty

1 year limited warranty



HEADQUARTERS
139 TOWNSEND STREET
SUITE 200
SAN FRANCISCO, CA 94107
PHONE 1-866-802-1600
www.vivato.net

RESEARCH AND DEVELOPMENT
12610 E. MIRABEAU PARKWAY
SUITE 900
SPOKANE, WA 99216
PHONE 509-343-6001