Quick Installation Guide

Professional Accesspoint

AP6 (W1 & W2)

Overview

The IEEE 802.11g AP6 wireless access point (AP) enables IEEE 802.11g or IEEE 802.11b client computers to access the resources on the Ethernet network. This professional product support enhanced wireless lan functionalities for professional users based on international standards and certifications.

Features

- fulfilled the IEEE 802.11g and IEEE802.11b (DSSS) 2.4GHz specifications
- high data rates from 54,48,36,24,18,12,9,6 11, 5.5, 2 and 1Mbps
- smooth integration of wireless and wired Ethernet LAN networks
- provides building to building connections
- WDS provides the simultaneous WLAN bridge an WLAN AP modus
- Auto fall back of data rate
- 64 / 128 bit WEP and WPA encryption to protect the WLAN
- provides IEEE 802.1x, for more WLAN security
- integrated DHCP server
- provides WEB based management
- transmit power control for permission-fair antenna matching

Specifications

- Standards: IEEE 802.11g (Wireless), IEEE 802.3 (Wired)
- Data rates: 54,48,36,24,18,12,9,6 11, 5.5, 2 and 1Mbps with auto fallback
- Security: 64/128-bit WEP and WPA data encryption, IEEE 802.1x
- Frequency: 2.400~2.4835GHz (Industrial Scientific Medical Band)
- Modulation: CCK@11/5.5Mbps, DQPSK@2Mbps und DBPSK@1Mbps, OFMD@54---6Mbps
- Radio technology: Direct Sequence Spread Spectrum (DSSS)
- Antenna: external detachable dipol antenna (with RPSMA connector – indoor only)
- LAN-interfaces: 10/100Mbps RJ-45 x 1, full duplex
- Power supply: 12VDC, 1A or PoE 802.3af standard (Power over Ethernet – power injector optional)
- Transmit power: 15dBm (default „High“)
- LED’s: Power, LAN Link/Activity, Wireless
- Temperature range: Operating: 32~131°F (0~55°C) - Storage: -4~158°F(-20~70°C)
- Humidity: 0-90% (not condensing)

Physical descriptions

Top side of housing

At the top side of the housing are 4 LED's which are giving informations for the normal status of the AP6. In the following you'll find a short description of each LED:

LED	Color	Status	Description
PWR	yellow	on	Power on.
		off	Power off.
LAN Link/Activity	green	on	Link
		off	No Link
WLAN Activity	green	on	WLAN Interface active.
		off	WLAN Interface not active.
ALV	green	flashing	AccessPoint active.
		Permanent on, or off	AccessPoint „hangs up".

Housing connectors

- The **antenna connector** (RPSMA) is at the W1 model at the left hand side at the back of the housing. At the W2 model you'll find the connector for the WLAN interface #1 at the left hand side and for the WLAN interface #2 at the right hand side at the back of the housing.
- The 12V DC **Power connector** is at the left hand side at the back of the housing. Please connect tis port to the power supply.
- The **LAN port** (RJ 45, 10/100 Base T) is at the left hand side at the back of the housing. This port provides you also the power over Ethernet connection (IEEE 802.3af). It is possible to deliver the power by using a power injector (a 4 pair Ethernet cable is necessary). Please use only the firstwave accessories for this options.
- The **default reset button** is at the right hand side at the back of the housing. By pressing this button (4 sec.) the AP will fall back to the factory default.

Transmit power control

Within the EU the max. transmit power is max. 20 dBm (100 mW). To use an external antenna with more gain it is necessary to adjust the transmit power control.. Following attitudes are available :

„High“	**= 15 dBm**
„medium High“	**= 12 dBm**
„medium“	**= 6 dBm**
„medium Low“	**= 2 dBm**
„Low“	**= 0 dBm**

Tunings of the firstwave antenna sets:

1ST-AP-SET-OM7	**= „High“**
1ST-AP-SET-OM11	**= “medium High”**
1ST-ANT-SET-D-8A	**= “High”**
1ST-ANT-SET-D-14A	**= “medium”**
1ST-ANT-SET-D-18A	**= “medium”**
1ST-ANT-SET-S120-12	**= “medium”**
1ST-ANT-SET-S180-11	**= “medium High”**

Hardware Setup

- Please connect the WLAN access point to a router, hub, switch or PC.
- Please connect one end of the standard UTP cable to the LAN port of the AP6 and the other end to a hub, switch or a router. To the scope of supply belongs a cross link cable. By using this cable, you are able to connect the AP6 direct to the LAN port of your laptop or PC .
- *Note: If the AP6’s WDS mode is activated, it is not necessary to connect the AP6to a wired network. Only 1 AP has to be connected to a wired LAN in the whole WLAN network.*
- Please connect the AC power supply to the power connector of the AP5
- Please use only the included power supply. A strange power supply can damage your AP.

The installation of the hardware is finished.

Getting Started

The Access Point provides different choices of management:

1. Configuration by using a browser like e.g. MICROSOFT® INTERNET EXPLORER
2. Configuration by using the Wi-Link Network Manager® which is included at the CD. The Wi-Link Manager needs a operation system WIN 98 SE or better. We recommend to use the Wi-Link Manager particularly with an employment of more than one AP.
   Please install the „Wireless Network Manager“ from CD in the path**\WMN\SETUP.EXE**
3. Configuration by using telnet
4. Configuration by using the RS232 interface (for details have a look at the manual at the CD).

TCP/IP Settings, Authentication

Starting from a wired or wireless station. Make sure that your LAN or WAN station is in the same subnet like the AP6.

The default settings of the AP6 are:

Default IP Address:	192.168.0.1
Default Subnet:	255.255.255.0
Default SSID:	wireless (Modell W2 = wireless1 and wireless2)
Default WEP:	without
Login:	root
Password:	root

You’ll find the complete manual at the included CD under LW:/DOCS