

# M4.5520H

Dual Radio 2.4, 5.3, 5.4 & 5.8GHz



## Outdoor wireless LAN access point

- IP66 housing with heating and cooling for -30° to +70° C
- Two 108 Mbps WLAN modules (IEEE 802.11a/b/g)
- IEEE 802.11i encryption also in P2P mode
- 19 channels with up to 1000 mW transmitting power (EIRP)
- Optimal for point-to-point connections over large distances
- IPSec VPN with hardware acceleration (optional)

## Stable and robust

The IP66 housing is resistant to strong water jets, features integrated heating and cooling and can be sturdily mounted on walls or poles, all of which makes the M4.5520H ideally suited for locations where the demands on stability and robustness are highest.

Be it in a harbor, in mountainous terrain, or from roof to roof in the city – the M4.5520H can support stable, high performance, long-serving WLANs in any environment.

It can be mounted easily, flexibly, and up to 100m from the nearest power supply thanks to Power over Ethernet.

## High Speed Wireless

With two integrated 108 Mbps wireless modules that comply with the WLAN standards IEEE 802.11a and IEEE 802.11b/g, M4.5520H can be operated in parallel in the 2.4-GHz and 5-GHz frequency bands.

This makes it ideal as a relay to extend point-to-point wireless connections, or as a wireless-connection end point that provides WLAN coverage to public spaces.

It is fitted with one LAN and one WAN connector and, with its integrated DSL router, serves as a central router and Internet gateway.

## Professional security

The M4.5520H sets standards in security. All security features are integrated. Apart from 802.11i (also for point-to-point connections), WPA2, 802.1x, LEPS, ACL and VLAN, the router is equipped with a stateful inspection firewall and optional IPSec VPN.

The AirLancer Extender Outdoor antennas are designed for optimal compatibility with the features of the M4.5520H.

Whatever the application – be it campus coverage, point-to-point connections over several kilometers, with the 2.4 GHz or 5 GHz bands – we have the fitting antenna..

# M4.5520H

## SPECIFICATIONS

<b>Frequency range</b>	Two WLAN modules with 2400 - 2483.5 MHz (ISM) or 5150 - 5750 MHz	
<b>Standards</b>	IEEE 802.11g / IEEE 802.11b, IEEE 802.11a: fully compliant to ETSI requirements using TPC and DFS	
<b>Transfer rates *</b>	Up to 108 Mbps nach IEEE 802.11a (fallback to 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 Mbps, automatic rate selection) Up to 108 Mbps nach IEEE 802.11g (fallback to 48, 36, 24, 18, 12, 9, 6 Mbps, automatic rate selection) compatible to IEEE 802.11b, 802.11 b/g compatibility mode or pure g or pure b selectable, Super A/G, Bursting and hardware data compression	
<b>Transmission range *</b>	Depends on used outdoor antennas By use of the included antennas: Up to 150m (up to 30 m indoor)	
<b>Transmission power</b>	Up to 20 dBm at 2.4 GHz, up to 16 dBm at 5 GHz	
<b>Radio Channels</b>	Up to 19 non overlapping channels (5 Ghz range), or up to 13 channels (2.4 GHz range), while 3 of them are non overlapping	
<b>Operating Modes</b>	WLAN access point	unlimited number of clients; seamless handover, IAPP support, IEEE802.11d support; Multi SSID 8 independent WLAN networks simultaneous
	WLAN bridge	Point to multipoint networking of up to 7 Ethernet LANs per WLAN interface (mixed operation possible), broken link detection, blind mode, up to 32 VLAN simultaneous for WLAN connections
	WAN router	DSL router, IP/IPX router, NAT/reverse NAT (IP masquerading) DHCP server, DHCP client, DHCP-relay server, DNS server, PPPoE client (incl. MultiPPPoE), PPTP client and server, NetBIOS proxy, DynDNS client, NTP, port mapping Policy-based routing based on routing tags, tagging with firewall rules, dynamic routing with RIPv2
	WLAN client	Transparent WLAN-Client mode for connecting printers or PCs by Ethernet
<b>Security</b>	WLAN	IEEE 802.11i / WPA2 with passphrase or 802.1x and hardware accelerated AES, Closed network, WEP64, WEP128, WEP152, LEPS, access control lists, RADIUS client, user authentication, 802.1x / EAP
	Router, LAN	Stateful inspection firewall, IP masquerading, (NAT/PAT), inverse masquerading, packet filtering, login rejection, URL-blocking, denial of service protection, intrusion detection QoS with VLAN priority for VoIP and VoWLAN, optionally VPN gateway
<b>Management</b>	LANtools (professionelle management software for Windows) incl. group configuration and WLANmonitor, WEBconfig (HTTP / HTTPS), SSH, Telnet, Telnet/SSL, TFTP, SNMP (MIB II, 802.11, 802.1D, 802.3, Private MIB), RADIUS, Syslog, individual access control for up to 16 administrators, CRON-services (scheduled events), TFTP Client and Server with variable file names (name, MAC/IP address, serial number), scripting function for batch programming of all command line parameters and for transfer of configuration files over different software versions and devices incl. test mode for changing of different parameters	
<b>Connectors</b>	LAN	10/100Base-TX, Autosensing, Auto Node-Hub
	WAN	10/100Base-TX, Autosensing, Auto Node-Hub
	WLAN	1 2 x reverse N-connector with antenna diversity
	WLAN	2 1 x reverse N-connector with antenna diversity
	Power feeding	Reset switch via power over Ethernet**, 1 x PoE injector included
<b>Antenna connectors</b>	Two dual-band-Dipol antennas included. 3 reverse N to N adapter cable included for connection of all AirLancer-Extender outdoor antennas or antennas of other vendors. Please respect the restrictions given in your country when setting up an antenna system. Please call us on 020 8286 8080 for help with calculating the correct antenna setup.	
<b>Housing</b>	235 mm x 210 mm x 80 mm (B x H x T), 3,4 kg, robust metal housing, protection class IP66, prepared for wall and top-hat rail mounting, 6 LED for status signalling	
<b>Conformity</b>	CE conformity after ETS 300 328, ETS 300 826, EN 55022, EN 55024, EN 60950	
<b>Certifications</b>	Notified in Germany, Belgium, The Netherlands, Luxembourg, Austria, Switzerland, United Kingdom, Italy, France, Czech Republic, Denmark	
<b>Environment / temperature</b>	-30 °C to +70 °C at 95 % max. humidity (non condensing)	
<b>Extend of supply</b>	PoE-LAN-cable with waterresist connector (CAT.5, STP, 15m), 2 x 360° Dual-band antennas, 3 adapters cable reverse N to N, 1-port PoE Injector with internal wide range power supply, printed manual (German, English), software CD	
<b>Service</b>	Warranty	3 years, PoE Power Injector: 2 years
	Support	Via hotline and Internet
<b>Options</b>	VPN Option	(25 channels, 50 configurable, hardware accelerator)
	Public Spot Option	(Authentication and Accounting software for hotspots)

\*) The effective diastance and transmission rate that can be achieved are depending of the giving building conditions!

\*\*) Operation only with the included PoE adapter