

WILIBOX Outdoor CPE WLP-510, WLP-511



WILIBOX Outdoor CPE (customer premise equipment) WLP-510 and WLP-511 are economical and robust network elements for fixed wireless access networks. Built in high gain 20 dBi 5 GHz antenna enables operators to build large wireless access cells on 5 GHz frequency. WLP-511 is equipped with second 802.11g radio, which allows creating cost effective wireless repeaters.

WLP-510/511 are driven by powerful and highly functional WILI-S networking software with centralized management option using WILIBOX RCMS centralized management system. For more information on software functionality please refer to corresponding data sheets.

WLP-510/511 are deployed and used in real telecom operator production networks.

Physical specifications

Wireless

Wireless standards and modulation	IEEE 802.11a (OFDM) IEEE 802.11b/g (DSSS; OFDM) (only WLP-511)
Wireless frequency range	4.90 - 5.85GHz (including FCC security band) 2.400 - 2.483GHz (only WLP-511)
Data rates	802.11g: 54, 48, 36, 24, 18, 12, 9, 6Mbps 802.11a: 54, 48, 36, 24, 18, 12, 9, 6Mbps 802.11b: 11, 5.5, 2, 1 Mbps (only WLP-511)
Supported frequency bandwidths	40 MHz (Turbo), 20 MHz, 10 MHz (Half rate), 5 MHz (Quarter rate)
Output Power at antenna connector	0-20 dBm Adjustable max. TX power 20 dBm (IEEE 802.11b) (only WLP-511) 20 dBm (IEEE 802.11g) (only WLP-511) 18 dBm (IEEE 802.11a)
Sensitivity	-92 dBm @ 6Mbps (802.11a), -73 dBm @ 54Mbps (802.11a), -95 dBm @ 1Mbps (IEEE 802.11b), (only WLP-511) -90 dBm @ 11Mbps (IEEE 802.11b), (only WLP-511) -92 dBm @ 6 Mbps (IEEE 802.11g), (only WLP-511) -73 dBm @ 54 Mbps (IEEE 802.11g) (only WLP-511)
Antenna	built in 20dBi for 802.11a external N type female connector for 802.11b/g (only WLP-511)
Typical range	5 km
Throughput	20Mbit/s - 3km 15Mbit/s - 5km

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Hardware

Interface	1 x LAN 10/100BaseT Mbps RJ-45 1 x WLAN 802.11a 1 x WLAN 802.11b/g (only WLP-511)
Environmental specifications	IP 65 -40 to +55C
Humidity	10-90% relative non-condensing humidity
Power consumption	10W max
Power supply	Power over Ethernet with inserter 48VDC
Mount options	Mast mountable
Dimensions	364 mm x 258.5 mm x 98 mm (W x H x O)
Weight	2 kg
Warranty	1 year

Software highlights

Management

WEB management via HTTPS
 Command line management via SSH, Telnet
 Configuration file upload via HTTPS and FTP
 RCMS configuration, firmware management and status reporting agent with NAT/ Firewall traversal functionality
 Subnet or VLAN for management traffic
 Management access control list
 Administrator authentication via RADIUS or TACACS
 SNMP V1/2/3
 SNMP Traps
 Supported MIB's: 802.11, 802.1x, MBII, RADIUS authentication, RADIUS accounting
 SYSLOG support including remote servers and debug levels
 Automatic configuration and provisioning with WILIBOX RCMS

Networking

VLAN tagging, up to 4096 VLAN tags, VLAN pass-through
 Large frame support 1600 bytes
 Bridging, shaping tree protocol (STP)
 IP routing
 DHCP server, client, relay
 DNS relay, proxy
 NTP and internal clock support

Per VLAN, IP tunnel or physical interface networking settings
 802.1x authenticator
 802.1x supplicant
 MAC filtering per interface
 IP filtering per interface
 Stateful inspection firewall
 Multiple GRE tunnels
 NAT/NAPT/IP masquerading interface

Wireless Security

WPA/WPA2 personal and enterprise (with dynamic key from remote RADIUS server) TKIP, AES (CCMP)
 Secure WDS mode, WDS inter access point traffic is secured by
 WPA/WPA2 in personal or enterprise modes
 Static and dynamic WEP
 802.1x with EAP-MD5, EAP-TLS, EAP-PEAP, EAP-SIM, EAP-LEAP
 Layer 2 intra access point client isolation
 SSID broadcasting suppression
 Static wireless
 Access Control List
 MAC address filtering