



to w net®

# 900-20-BS

## base station mimo

802.11 ac  
5 GHz  
866 Mbps

PoE  
1 Radio  
IP 68

### Radio

<b>Frequency range</b>	From 4920 to 6100 MHz
<b>Radio Interface</b>	1
<b>Reference standard</b>	ETSI Hiperlan2, 802.11a, 802,11ac
<b>Modulation Technique</b>	OFDM, TDD (disabile CSMA/CD), TDMA
<b>Channel dimension</b>	20MHz, 40MHz, 80MHz(x2) and arbitrary (2,5MHz-30MHz)
<b>Channel spacing</b>	5MHz, 10MHz, 20MHz or customizable
<b>Channel management</b>	DFS (Dynamic Frequency Selection), Radar Free in according to CEPT ERC 70-03, Auto Channel
<b>Max Output power</b>	1W o 30dBm max mean e.i.r.p.
<b>Max Radiation density</b>	50mW/MHz in according to ERC/DEC(04)08
<b>TX Output Power</b>	31dBm Max
<b>TX Power Regulation</b>	0-30dBm with ATPC (+/- 3dBm) , according to CEPT ERC 70-03
<b>Modulations</b>	OFDM: BPSK, QPSK, 16 QAM, 64QAM, 256QAM DSSS: DBPSK, DQPSK, CCK
<b>Sensitivity radio 1</b>	802.11ac: -96 dBm @ 6Mbps to -81 dBm @ 54 Mbps 802.11ac: -96 dBm @ MCS0 to -77 dBm @ MCS7 -72 dBm @ MCS9

### Communication

<b>Standard Ethernet</b>	802.3 CSMA/CD Gigabit Ethernet Full Duplex, Autosensing, Auto MDI/MDX	
<b>Bridge</b>	IPv4, IPv6 addressing	Spanning Tree Protocol (STP, RSTP)
	Real time monitoring MAC Address table	IP address assignment for router access
	Multiple bridge interface	Bridge interface firewalling
	Bridge associations on a per interface basis	Client L2 Isolation
	Protocol can be selected to be forwarded or discarded	Wireless controller server and client
<b>Routing</b>	Static, RIP (V1,V2)-MPLS, VPLS, OSPF, BGP (V4)-MESH HWMP+	
<b>Data Security</b>	WEP 64,128,152 Encryption	WPA, WPA2, WPA-PSK (802.11i)
	AES-CCM & TKIP Encryption 256 bit	RADIUS server authentication
	IP address filtering and protocol filtering	MAC-ADDRESS authentication and filtering
	VPN IPSEC tunnel encryption, PPTP, L2TP, EoIP tunnel	Server and client PPPoE
<b>VLAN Support</b>	802.1q, Multiple VLAN interface, inter VLAN routing, QinQ, Nesting VLAN	
<b>QoS</b>	Class Based Queuing (CBQ), Layer 2 traffic priority (802.1p), Layer 3 traffic priority (IPToS RFC791), Layer 4-7 traffic shaping	

## Management and Configuration

<b>Management option</b>	Telnet client, Telnet server, MAC Telnet server, SSH, GUI su SSH, HTTP/HTTPS, WIRELESS CONTROLLER
<b>Software upgrade</b>	FTP, Drag & Drop su GUI SSH
<b>Access Protection</b>	Multilevel Users Management (read, write, etc) User Management over Radius Server WEB-Based Software for geographic network management and alerting based on SNMP (Optional) Server RADIUS with Java Users management interface (optional)
<b>SNMP</b>	SNMP V1/2/3 802.11 MIB, BRIDGE MIB, Private RTMTC MIB, Trap SNMP

## Standards

<b>Safety Standard</b>	EN60950-1
<b>Radio Standards</b>	EN301893, EN300836, EN300328, EN300652
<b>EMC Standards</b>	EN301489
<b>Environment Standards</b>	RoHS Compliant according to 2002/95/CE
<b>TPC &amp; DFS</b>	ERC/DEC (99)23
<b>Frequency Band</b>	ERC 70-03

## Connections

<b>Internet Connector</b>	1 x RJ45 Connector System
<b>Antenna Connector</b>	2 x QMA(F) S/T

## Structural

<b>Operating Temperature</b>	ODU: -40°C / +65°C IDU: 0°C / +50°C
<b>Weight</b>	1,4 Kg
<b>Dimensions (HxLxW)</b>	214 x 149 x 75 mm
<b>Power Supply</b>	DC 12-24V or 48V 802.3af-AC 200-264 Vac
<b>Maximum Power</b>	17 W
<b>Lightning Protection</b>	in according to EN 61000-4-5 up to 25KV with magnetic filter and gas dischargers Radio protection DC Ground
<b>IP Protection</b>	IP68 certified according IEC529
<b>Solar Radiation</b>	ASTM G53 1000h
<b>Salt Fog</b>	IEC 8-2-11 Ka 500 hours



Performance and endurance



ETH PoE



Energy Station TW-IDU-Node included

