



t o **w** n e t[®]

900-20-BS XX

integrated base station

802.11 ac
5 GHz
866 Mbps

Dual Slant
1 Radio
IP 68

Radio

Frequency range	From 5150 -5725 (4920 to 6100) MHz
Radio Interface	1
Reference standard	ETSI Hiperlan2, 802.11a, 802,11ac
Modulation Technique	OFDM, TDD (disabile CSMA/CD), TDMA
Channel dimension	20MHz, 40MHz, 80MHz(x2) and arbitrary (2,5MHz-30MHz)
Channel spacing	5MHz, 10MHz, 20MHz or customizable
Channel management	DFS (Dynamic Frequency Selection), Radar Free, Auto Channel
Max Output power	1W o 30dBm max mean e.i.r.p.
Max Radiation density	50mW/MHz
TX Output Power	31dBm Max
TX Power Regulation	0-30dBm with ATPC (+/- 3dBm)
Modulations	OFDM: BPSK, QPSK, 16 QAM, 64QAM, 256QAM DSSS: DBPSK, DQPSK, CCK
Sensitivity radio 1	802.11ac: -96 dBm @ 6Mbps to -81 dBm @ 54 Mbps 802.11ac: -96 dBm @ MCS0 to -77 dBm @ MCS7 -72 dBm @ MCS9
Antenna & version	Integrated 17dBi VSWR 1.7:1 Pol. Dual Slant +/- 45° 3dB HPlane 60° (cod. 900-20-BS-60) Integrated 16dBi VSWR 1.7:1 Pol. Dual Slant +/- 45° 3dB HPlane 90° (cod. 900-20-BS-90)

Communication

Standard Ethernet	802.3 CSMA/CD Gigabit Ethernet Full Duplex, Autosensing, Auto MDI/MDX	
Bridge	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
Routing	Static, RIP (V1,V2)-MPLS, VPLS, OSPF, BGP (V4)-MESH HWMP+	
Data Security	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
VLAN Support	802.1q, Multiple VLAN interface, inter VLAN routing, QinQ, Nesting VLAN	
QoS	Class Based Queuing (CBQ), Layer 2 traffic priority (802.1p), Layer 3 traffic priority (IPToS RFC791), Layer 4-7 traffic shaping	

Management and Configuration

Management option	Telnet client, Telnet server, MAC Telnet server, SSH, GUI su SSH, HTTP/HTTPS, WIRELESS CONTROLLER
Software upgrade	FTP, Drag & Drop su GUI SSH
Access Protection	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)
SNMP	SNMP V1/2/3 802.11 MIB, BRIDGE MIB, Private RTMTC MIB, Trap SNMP

Standards

Safety Standard	EN60950-1, EN62368-1
Radio Standards	EN301893
EMC Standards	EN301489
Environment Standards	RoHS Compliant according to 2002/95/CE)

Connections

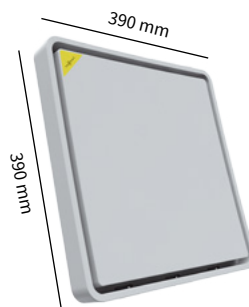
Internet Connector	1 x RJ45 Connector System
Antenna Connector	2 x QMA(F) S/T

Structural

Operating Temperature	ODU: -40°C / +65°C IDU: 0°C / +50°C
Weight	4 Kg
Dimensions (HxLxW)	390 x 390 x 75 mm
Power Supply	DC 12-24V or 48V 802.3af-AC 200-264 Vac
Maximum Power	17 W
Lightning Protection	in according to EN 61000-4-5 up to 25KV with magnetic filter and gas dischargers Radio protection DC Ground
IP Protection	IP68 certified
Solar Radiation	ASTM G53 1000h
Salt Fog	IEC 8-2-11 Ka 500 hours



integrated antenna



Energy Station TW-IDU-Node included

