PRO⊠IM ®
AN SRA COMPANY

Edge 1045

Product Snapshot

Proxim's Edge 1045 is a versatile small wireless broadband solution designed for public safety, ITS, and smart-city applications.

Offering the same multi-use versatility as the Edge 1015, the Edge 1045 provides the added flexibility of operation in the 4.9 GHz public safety and 5.2 & 5.8 GHz UNII bands.It also supports 5, 10, 20, and 40 MHz channel sizes for operation in noisy environments.

- 2x2 MIMO radio delivering up to 100 Mbps
- Advanced QoS for quad-play applications
- AES 128 encryption and Radius authentication
- 5, 10, 20, and 40 MHz channels.

One Device, Multiple Uses

Whether you need a Point-to-Point endpoint, Multipoint CPE, or MultiPoint Base Station, the Edge 1045 fits the bill.

Powered by WORP®

Proxim WORP enables the most efficient wireless broadband access possible in a packet-based network. Advanced QoS controls, committed interface rates, latency controls, IGMP snooping, and native multicast support allow granular service level management and the best video performance available in this product class.

Flexible Antenna Options

Includes an integrated 15 dBi 35-degree dual-polarity antenna and offers external connectors for extended range.

Secure

AES 128 encryption with Radius-based authentication and secure management through SSL/ TLS1.2, SSH, and SNMPv3.

Rugged Reliability

IP67 rated metal enclosure to ensure years of reliable service in harsh environments, including high winds, high salt, and temperature extremes.

Specifications

PRODUCT MODELS

MP-1045-BS3-US	Edge Multipoint 1045, Base Station, 100 Mbps, integrated antenna and RP-SMA	PN: 901-00334
MP-1045-BS3-32SU-UPG	Edge Multipoint 1045, Base Station, support for 1 to 32 SU license upgrade	PN: 997-00059

INTERFACES

WIRED ETHERNET	One auto MDI-X RJ45 10/100/1000Mbps Ethernet with PoE in
WIRELESS PROTOCOL	WORP® (Wireless Outdoor Router Protocol)

RADIO & TX SPECS

MIMO	2x2
MODULATION	OFDM BPSK-QAM256
FREQUENCY	4.900 – 5.925 GHz (Subject to Country Regulations)
CHANNEL SIZE	5, 10, 20 and 40 MHz
THROUGHPUT	Up to 100 Mbps
TX POWER	Up to 24 dBm (dual chain)
TX POWER CONTROL	0 - 21 dB, in 1 dB steps. Automatic TPC with configurable EIRP limit

	5 MHz	10 MHz	20 MHz	40 MHz
TX POWER	MCS0:	MCS0:	MCS0:	MCS0:
2 RF	23	24	24	23
	MCS7:	MCS7:	MCS8:	MCS9:
2 RF	20	20	19	18
RX SENSITIVITY (Per=10^{-6})	MCS0:	MCS0:	MCS0:	MCS0:
	-95	-92	-89	-86
	MCS7:	MCS7:	MCS8:	MCS9:
	-78	-75	-67	-62
Throughput-MIMO 2x2 Mode	25 Mbps	50 Mbps	100 Mbps	100 Mbps
OTHER	Dynamic Channel Selection (DCS) based on interference detection,			
	Automatic Transmit Power Control (ATPC) with EIRP limit support			

MANAGEMENT

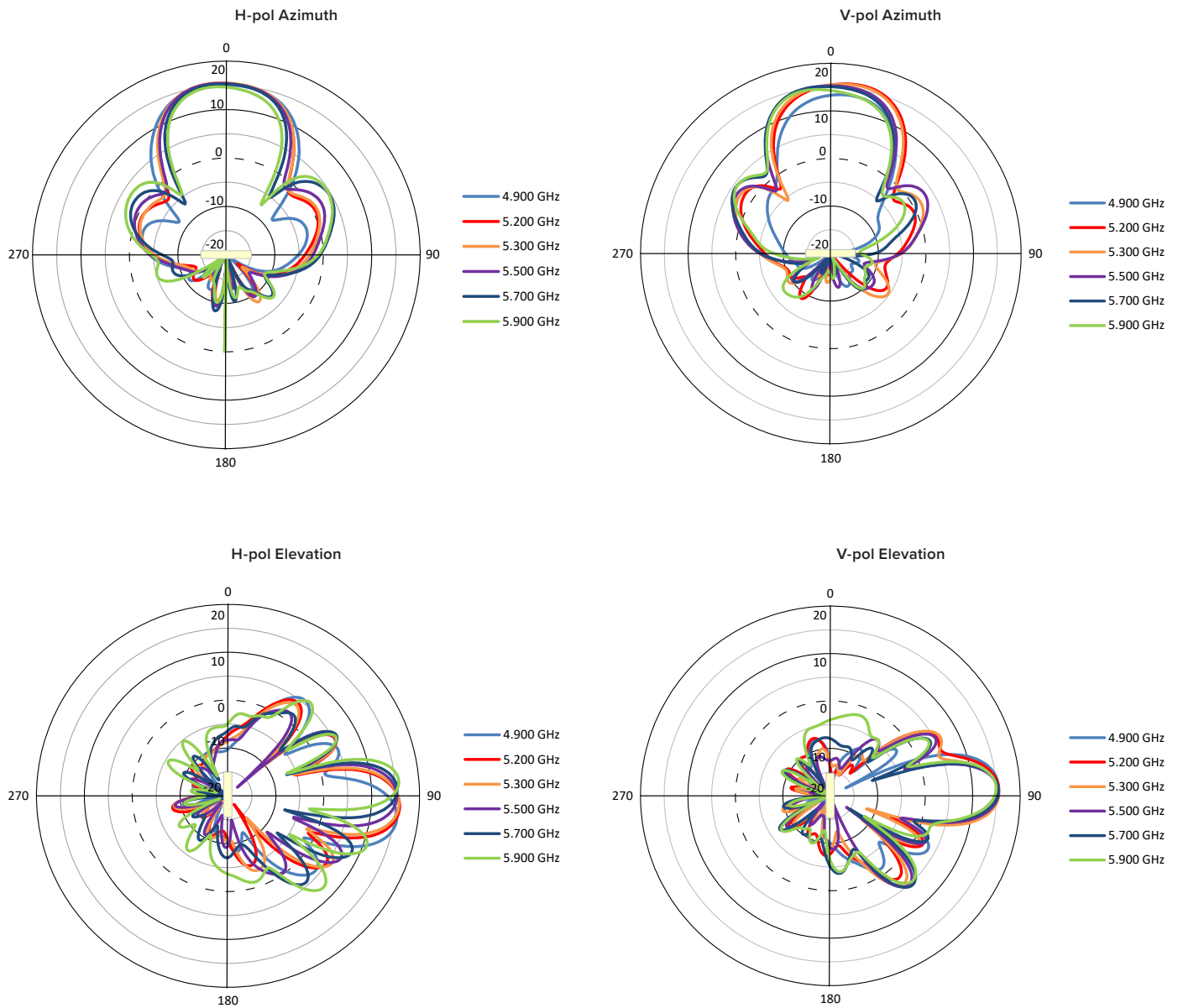|	
REMOTE	Telnet and SSH, Web GUI and SSL/TLS1.2, TFTP, SNMPv3
SNMP	SNMP v1-v2c-v3, RFC-1213, RFC-1215, RFC-2790, RFC-2571, RFC-3412, RFC-3414, Private MIB
OTHER	Syslog, sFlow™ agent, SNTP and local time, Spectrum analyzer
Multi-Language Support	Web Interface available in English, French, Spanish and Chinese

SECURITY

ENCRYPTION	AES 128
AUTHENTICATION	Internal MAC Address Control List, Radius based Authentication (with VLAN and QoS provisioning)

Integrated 2x2 MIMO 15 dBi (12 dBi below 5 GHz) Dual Polarized 35 degree Panel Antenna
plus two RP-SMA Connectors
(Software switch between integrated antenna and connectors)

ANTENNA PATTERNS (Sector Mode)

H-pol Azimuth

- 4.900 GHz
- 5.200 GHz
- 5.300 GHz
- 5.500 GHz
- 5.700 GHz
- 5.900 GHz

V-pol Azimuth

- 4.900 GHz
- 5.200 GHz
- 5.300 GHz
- 5.500 GHz
- 5.700 GHz
- 5.900 GHz

H-pol Elevation

- 4.900 GHz
- 5.200 GHz
- 5.300 GHz
- 5.500 GHz
- 5.700 GHz
- 5.900 GHz

V-pol Elevation

- 4.900 GHz
- 5.200 GHz
- 5.300 GHz
- 5.500 GHz
- 5.700 GHz
- 5.900 GHz

QoS

Asymmetric Bandwidth Control	Asymmetric UL/DL committed and maximum information rate per service flow
Packet Classification Capabilities	802.1p priority, IPTOS, VLAN ID, IP addresses, ports, Ethernet addresses, IP protocol, and EtherType
Scheduling	Best Effort, Real Time Polling Services

NETWORK

MODES	Bridging, Routing (RIP v2 and IP tunneling)
IP STACK	IPv4 and IPv6 simultaneously
GATEWAY FEATURES	DHCP Server & relay, NAT with Std ALGs, PPPoE end point with Proxy DNS
VLAN	802.1Q: Management VLAN. Transparent, Access, Trunk and Mixed mode. QinQ double tagging

POWER

802.3af/at compliant

POWER CONSUMPTION

10 W typical, 12 W max in MIMO 2x2 mode

ENVIRONMENTAL SPECS	OPERATING TEMPERATURE	STORAGE TEMPERATURE	HUMIDITY - IP RATING	WIND LOADING
	-22° to 131° Fahrenheit (-30° to 55° Celsius)	-58° to 158° Fahrenheit (-50° to 70° Celsius)	100% relative humidity—IP67	112.5 mph (180 km/h)
PHYSICAL SPECS	**DIMENSIONS PACKAGED**	**DIMENSIONS NPACKAGED**	**WEIGHT (PACKAGED)**	**WEIGHT (UNPACKAGED)**
MP-1045-BS3	12.2 x 8.9 x 3.85 in (310 x 226 x 98 mm)	6.7 x 8.55 x 2.2 in (170 x 217 x 56 mm)	4.74 lbs (2.15 kg)	2.62 lbs (1.19 kg)

SAFETY STANDARDS

IEC 62368-1:2014 & 60950-22:2016.

UL 62368-1, 2nd Ed. & 60950-22, 2nd Ed.

CERTIFICATIONS

FCC part 15B class B (EMC), part 15E (5.2 and 5.8 GHz radio) and part 90Y (4.9 GHz radio)

PACKAGE CONTENTS

- One Edge MP-1045-BS3 with integrated antenna plus two RP-SMA connectors
- Two SMA weather proofing caps
- One M25 weather proofing cable gland
- One wall mounted power injector with US plug
- One pair of hose clamps
- One Grounding kit
- One Quick Installation Guide

MTBF & WARRANTY

>250 000 hours, 2-year warranty, ServPak Extended Support available.

ABOUT PROXIM WIRELESS :

Proxim Wireless is a global leader in advanced wireless broadband and WiFi solutions that deliver high performance and high availability communications.

Celebrating 40 years of pioneering wireless solutions, Proxim is recognized for unparalleled reliability, superior performance, and drive for innovation.