



Outdoor Wireless Router
W4N-CPE-g23, W4N-CPE-g23u,
W4N-CPE-g18



CPE Bridge Router family

W4N-CPE-g18, CPE-g23, CPE-g23u



Wireless CPE/Bridge Router 802.11a/h with 18/23dbi integrated antenna. Wi4Net CPE-g18 and CPE-g23 Wireless CPE/Bridge Router products family are the perfect solution for all Wireless 5GHz links and customers device.

Made with compact design, integrated High Gain antenna in IP66 case, 802.11a/h, W4N CPE-g18 and CPE-g23 are the best solutions to deploy high volume CPEs in a 5GHz WISP rural infrastructure.

CPE-g18 and CPE-g23's main features:

- Powered by Mikrotik rb411
- Aluminium case
- Powerful
- Compact design

CPE Bridge Router Family

W4N-CPE-g23

Wireless CPE/Bridge Router 802.11a/h with 23dbi integrated antenna, metal case

W4N-CPE-g23u

Wireless CPE/Bridge Router 802.11a/h with 23dbi integrated antenna, metal case 23dbm output power

W4N-CPE-g18

Wireless CPE/Bridge Router 802.11a/h with 18dbi integrated antenna, metal case

All Outdoor Conditions

Wi4Net products are the perfect solutions for all outdoor wireless situations.

Backhauling, Point-to-Point, Point-to-Multipoint or Mesh network are easily implementable with the extreme modular Wi4Net wireless family.

Wireless ISPs, Local Utilities, Municipalities, Enterprises and Hot Spot solutions can achieve the best performance from Wi4Net products family together with the associated antennas.

Wireless ISPs can quickly build up broadband Internet infrastructure for rural zone together with VoIP telephony access and wi-fi coverage for nomadic access.

Enterprises can connect different building or provide remote control of their machinery in all the outdoor areas.

Municipalities can easily implement wireless IP networks for connecting remote offices and for increasing public safety by installing remote real time videosurveillance cameras.

Local Utilities can rapidly take control over the remote equipment for Water, Gas and Electricity as well as Environment stations for pollution control and monitoring.

Hot Spot solutions are plug-and-play with the Wi4Net products embedded software and can share earnings with banner, walled garden web site or advertisement portal page.

Hot spots can be implemented in Hotel, Residence, Marine Ports, Camping as sea front touristic places.



Mikrotik® RouterOs® Software Functionality

All Wi4Net products are Wireless Router with a complete suite of software functionality

W4N CPE g18

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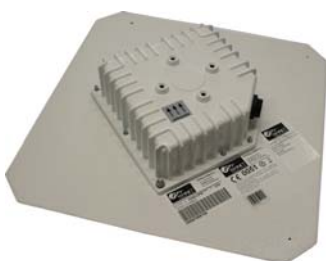
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W4N CPE g23

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Layer 2 features

- Ipv4 and IPv6 support

Bridging

- IEEE 802.1D spanning tree protocol
- IEEE 802.1w rapid spanning tree protocol
- Multiple bridge interface
- Bridge firewalling
- MAC NAT

Switch

- Port switch
- Tagging
- Replication

VLAN

- IEEE 802.1Q VLAN tagging on Ethernet and wireless interfaces
- Multiple VLANs
- VLAN bridging

Layer 3 features

Routing

- Static routing
- ECMP equal cost multipath routing
- Policy based routing
- RIP v1 / v2
- OSPF v2 / v3
- MPLS
- Multicast
- BGP
- VRF

QoS Management

- Hierarchical HTB QoS system with burst
- Per IP/protocol / subnet / port / firewall mark
- PCQ, RED, SFQ, FIFO queue
- CIR, MIR, contention ratios, dynamic client rate equalizing (PCQ), burst, peer-to-peer protocol limitation

Firewall and NAT

- Stateful packet filtering
- Peer-to-peer protocol filtering
- Source and destination NAT
- Packet classification by:
 - Source MAC
 - Interfaces
 - IP address and subnets
 - Ports and port range
 - Protocols
- Protocol options(ICMP type, TCP flags and MSS)
- ToS (DSCP)
- Packet content (matching sequence/frequency)
- Packet size
- Time

Tunnelling protocol

- PPTP, PPPoE and L2TP access concentrators and clients
- PAP, CHA MSCHAP1, MSCHAP2 authentication protocols
- RADIUS authentication and accounting
- MPPE encryption; compression for PPPoE
- Data rate limitation
- Differentiated firewall
- PPPoE dial on demand
- IPIP tunnels
- EoIP (Ethernet over IP)

NTP

- Network time protocol server and client

IPSec

- IP security AH and ESP protocols
- MODP Diffie-Hellman groups 1,2,5
- MD5 and SHA1 hashing algorithms
- DES, 3DES, AES-128, AES-192, AES-256 encryption algorithm
- Perfect Forwarding Secrety (PFS) MODP groups 1,2,5

Proxy

- FTP and HTTP caching proxy server
- HTTPS proxy
- Transparent DNS and HTTP proxying
- SOCKS protocol support
- DNS static entries
- Support for caching on separate drives
- Access control list
- Caching lists
- Parent proxy support

DHCP

- DHCP server and client per interface- DHCP relay
- Multiple DHCP networks
- Static and dynamic DHCP leases
- RADIUS support

VRRP

- Virtual Router Redundancy Protocol (VRRP) for high availability

UPnP

- Universal Plug & play support

Management

Monitoring/accounting

- IP traffic accounting
- Firewall action logging
- MRTG graphs accessible via web

Management

- SNMP read-only
- SSH and Telnet CLI
- WEB GUI
- Windows based Winbox GUI

Tools

- Ping
- Traceroute
- Bandwidth test, server and client
- Ping flood
- Packet sniffer
- Torch
- Dynamic DNS update tool

Storage

FTP server

- Secure Copy
- Redundant storage

Wireless features

Operation Modes

- Bridge point-to-point and point-to-multipoint
- WDS (Wireless Distribution System)
- Station (client mode)
- WDS dynamic/static mesh
- Multiple SSID/BSSID and virtual AP
- AP bridging
- Nstreme and Nstreme2 protocols for dual radio full duplex link
- Compression mode
- CSMA disable for P-to-P performance increase
- DFS: dynamic Frequency Selection
- TPC: Transmit Power Control
- Layer 2 Hybrid Wireless Mesh protocol (HWMP+) Mikrotik implementation

HotSpot features

- HotSpot portal gateway with Radius authentication and accounting
- Local database users or external Radius db
- Plug & play with transparent local IP mapping
- Data rate limitation
- Traffic quota
- Real-time status update
- Walled-garden IP or URL
- Login pages customizable
- iPass support
- SSL authentication with certificate
- Pop-up advertisement
- Guest users

Security

- WEP 40 bit and 104 bit
- WPA and WPA2
- PSK
- AES-CCN and TKIP
- Access control list
- Client connect list with single WPA key, rate and time limit
- Std FIPS 197 AES

Authentication

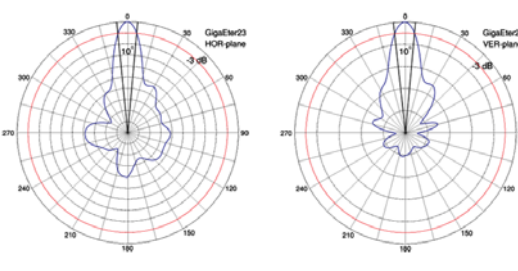
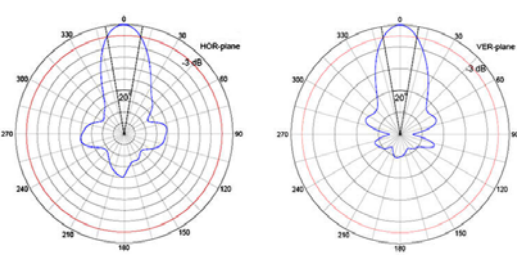
- Radius
- EAP and EAP-TLS

User Manager

Features

- Radius server web interface
- Billing information
- Online Session information
- Logging information
- Auto create users, with mail confirmation
- Hierarchical administration structure
- Authorize.net and PayPal payment portal
- Thermal printer voucher setup
- Customizable credit definition
- Rate, time and traffic amount limit

Hardware Specifications

Product Code		W4N-CPE-g23 - W4N-CPE-g18		W4N-CPE-g23u (support Turbo mode)	
Radio characteristics		Receive Sensitivity (dBm)	Max Output power (dbm)	Receive Sensitivity (dBm)	Avg. Output power (dbm)
5GHz 802.1 a/h data rates	6	-90 dBm	20	-94 dBm (± 1.5 dB)	23 dbm (± 1.5 dB)
	9	-88 dBm	20	-93 dBm (± 1.5 dB)	23 dbm (± 1.5 dB)
	12	-85 dBm	20	-91 dBm (± 1.5 dB)	23 dbm (± 1.5 dB)
	18	-82 dBm	20	-90 dBm (± 1.5 dB)	23 dbm (± 1.5 dB)
	24	-79 dBm	20	-86 dBm (± 1.5 dB)	23 dbm (± 1.5 dB)
	36	-76 dBm	17	-83 dBm (± 1.5 dB)	21 dbm (± 1.5 dB)
	48	-73 dBm	16	-77 dBm (± 1.5 dB)	19 dbm (± 1.5 dB)
	54	-70 dBm	13	-74 dBm (± 1.5 dB)	18 dbm (± 1.5 dB)
Product Code		W4N-CPE-g23 - W4N-CPE-g23u		W4N-CPE-g18	
Antenna gain pattern					
Antenna characteristic	Gain	23dbi		18dbi	
	Frequency	5150-5850 MHz		5150-5850 MHz	
	Polarization	Vertical		Vertical	
	Backward radiation	22 dB		22 dB	
	Vertical beamwidth	10°		20°	
	Horizontal beamwidth	10°		20°	
	VSWR	<1,5:1		<1,5:1	
	Impedance	50 Ohm		50 Ohm	
Wind loading	120 Km/h		120 Km/h		
Standards		IEEE802.11a/h			
Frequency Bands		802.11a/h hiperlan: 5,15 ~ 5,35GHz 5.47~5.725GHz with country regulations			
Channel		802.11a/h: 11 non overlapping (outdoor)			
Processor		RB411 MIPS 300Mhz			
Modulations		802.11a/h: OFDM (64-QAM, 16-QAM,QPSK, BPSK)			
Media Access Protocol		Wireless CSMA/CA, Ethernet CSMA/CD			
External connector interface		1 ETH/POE			
Configuration and Management		Management options Via Telnet, SSH, Web page, Windows utility Configuration upload/download Software upgrade and configuration FTP/TFTP download up/download SNMP agent SNMP V1 Client, MIB II, Bridge MIB			
Dimensions		Mounting (WxDxH): 40 cm x 40 cm x 6,5 cm Package (WxDxH): 32 cm x 34 cm x 9 cm			
Weight		1 kg approx			
Power Supply Specs		220 Vac; 24 Vdc; 0,8 A with passive POE input overload and short circuit protection 40000 hours MTBF		Led: Red: not connected Blinking: fault Green: working	
Environment Specs		Operating: -20°C +55°C Storage: -40°C +80°C Relative Humidity : up to 70% (non condensating) Rate: IP66			
Regulatory approvals		EN 60950-1:2001+A11 (EN 60950) - Product Safety EN 301 489-1 V1.6.1/ EN 301 489-17 V 1.2.1- EMC requirements for radio equipment EN 300 328 v1.7.1 - Technical requirements for 2 GHz radio equipment EN 301 893 V 1.3.1 - Technical requirements for 5 GHz radio equipment RoHs complaints			
Package contents		Antenna with integrated device Pole mount with nuts and bolts ETH cable insulator Power supply with integrated POE			
Accessories		IDU-BATT: Indoor Unit with battery backup and 55W power supply (Short circuit, over load and over voltage protection) up to 8 hours without power supply			
Warranty		Standard warranty: 12 months from date of purchase Extra warranty: 36 months total			

All the informations reported are subject to changes without any prior notification.

