OSBRiDGE 3

OSBRiDGE 3GN
Outdoor UMTS/GSM Wireless MiMO Router

PRODUCT HIGHLIGTS AND ADVANTAGES

- Exceptional WiFi/MiMO performance and coverage thanx to latest Atheros XSPAN technology.
- Built in industry leading Huawei HSDPA/GSM modem for best cellular WAN performance.
- Detachable antennas allow easy connection of external GSM or WiFi antenna to boost coverage where necessary.
- Wide DC Input voltage range for easy installation in the vehicle, boat or at home.
- Position the Access Point for best cellular reception and use any WiFi enabled device or computer nearby.
- No dongles or software installation required on the PC computers.
- Fast and easy installation where WiFi Internet Access is required - in the car when on the road, on the boat while on the water or in the vacation home when on holidays.
- Provide mobile hotspot at Remote Events or Emergency Sites to share one UMTS/GSM connection across many WiFi users.
- Provide wireless broadband Internet services available to passengers of public transport vehicles on the move.
- Built in security - WEP and WPA allows you or your group to work securely while protecting your bandwidth.
- Simple and Convinient - easy to set up sharing for friends and collegues.
- Built in secure VPN client allows creation of L2 bridged network over Cellular WAN for automation, industrial and easy remote access applications.
- Portable, rugged aluminium outdoor enclosure to withstand even the harshest weather conditions.
- Wide range of optional external antennas to improve cellular reception where necessary.

The OSBRiDGE 3GN, a member of new OSBRiDGE MOBiLE products family, is a high performance 2.4GHz MiMO outdoor access point, designed to provide secure and reliable internet access anywhere through cellular 2G/3G backhaul technologies such as GSM and UMTS, or traditional wired backhaul such as xDSL or Cable.

This OSBRiDGE MOBiLE Router can be conviniently installed anywhere where either temporary or permament WiFi Internet Access is required - in the car while on the road, on the boat while on the water, in the vacation or remote house or at construction and emergency sites. Robust outdoor architecture allow placement where cellular network signal is best and when necessary, external antenna connectors (both UMTS/GSM and WiFi) allow use of directional high gain antennas to effectively provide Wireless Internet Access where it would otherwise be unavailable. The OSBRiDGE 3GN MiMO Router leverages one built-in UMTS/GSM broadband modem for multiple user connections to the internet via WiFi 802.11b/g/n.

The OSBRiDGE 3GN is capable of operating as a gateway and route all incoming traffic from local 802.11b/g/n or ethernet interface to the internet via built-in high performance HSDPA modem. It is also possible to forward all outgoing traffic over built in ethernet port, using traditional Cable or xDSL connection for broadband Internal access, or use failover option to route traffic over backup

connection when primary link goes down.

The OSBRiDGE 3GN built in 2Tx2Rx MiMO Access Point offers transfer rates up to 270Mbps, which provides up to five times the throughput of previous 802.11b/g wireless devices, while maintaining full backward compatibility with 802.11b/g standards. Utilizing features such as Forward Error Correction coding, used to combat multi-path and noisy environments, the product operates seamlessly and efficiently in challenging environments with stable throughput and exceptional coverage. The system also features advanced algorithms for automatic selection of modulation schemes to maximize the data rate and improve spectral efficiency using latest technology based on Atheros® XSPAN Radio Technology.

Software features such as bridging, routing, NAT routing, SNMP, web management, advanced QOS, DHCP client/server, firewall, PPPoE and VPN clients, high grade encryption and built in troubleshot utilities make the OSBRiDGE 3GN one of the most flexible and cost effective outdoor broadband gateway platform available today.

OSBRiDGE 3GN is a robust outdoor unit designed to perform in difficult climatic environments and withstand even the harshest weather conditions. Built in passive Power over Ethernet system allows easy installation where only one ethernet cable is used for both data and power transmission for up to 100 feet (30 meters).

Interfaces

Wireless WAN	One UMTS/HSDPA/WCDMA/EDGE/GPRS
Wireless LAN	One 802.11b/g/n MiMO
Wired Interfaces	Two Fast Ethernet Interfaces

System

Processor	Atheros AR9130 MIPS32, 400MHz
Memory	4MB SPI FLASH, 32MB SDRAM

Wireless WAN

Type	Huawei E220 7.2 Mbps
Supported Modes	UMTS - HSDPA, GSM - EDGE, GPRS, 3GPP R5, R99
Radio System	GSM/GPRS/EDGE: 900 MHz/1800 MHz/1900 MHz
	HSDPA /WCDMA: 2100 MHz
Radio Frequency Band	GSM/GPRS/EDGE 900 MHz: UL: 880 MHz–915 MHz, DL: 925 MHz–960 MHz
	GSM/GPRS/EDGE 1800 MHz: UL: 1710 MHz–1785 MHz, DL: 1805 MHz–1880 MHZ
	GSM/GPRS/EDGE 1900 MHz: UL: 1850 MHz–1910 MHz, DL: 1930 MHz–1990 MHZ
	HSDPA/WCDMA 2100 MHz: UL: 1920 MHz–1980 MHz, DL: 2110 MHz–2170 MHz
Output Power	HSDPA/WCDMA 2100 MHz: Power Class 3, +24 dBm+1/-3
	GSM/GPRS 900 MHz: Power Class 4, +33 dBm±2
	GSM/GPRS 1800 MHz: Power Class 1, +30 dBm±2
	GSM/GPRS 1900 MHz: Power Class 1, +30 dBm±2
	EDGE 900 MHz: Power Class E2, +27 dBm±3
	EDGE 1800 MHz: Power Class E2, +26 dBm±3
	EDGE 1900 MHz: Power Class E2, +26 dBm±3
Antenna	2dBi Vertical, Linear Polarization, Detachable (SMA connector for external antenna)

Wireless LAN

Type	Atheros AR9102, 802.11b/g/n 2Tx/2Rx MiMO
Frequency Range	Europe: 2.400 – 2.472GHz (13 channels)
	USA: 2.400 – 2.462GHz (11 channels)
Output Power	+18 dBm
Wireless Data Rates	- 802.11b: 1, 2, 5.5, 11Mbps
	- 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps
	- 802.11n:
	20 MHz: 1 Nss: 65Mbps max, 2 Nss: 130Mbps max; 40 MHZ: 1 Nss: 135Mbps max, 2 Nss: 270Mbps max
Antenna	2x2dBi Rubber Duck, Detachable (RP-SMA connectors for external antennas)

Software

Operational Modes	Access Point, Access Point Client, Wireless Repeater
Security	Association Protocol – ESSID/BSSID, WEP 40/128, WPA, WPA2, AES
Features	Bridge, Router, NAT Router, PPPoE Client, Port Forwarding, QOS, DHCP Server/Client, VPN Client
Management	WEB Interface
Monitoring:	SNMPv2

Physical

Dimensions	250 mm X 210 mm X 90 mm
Operating Temperature	-40°C - +85°C
Enclosure	Aluminium, Weather and UV Protected, Outdoor Mountable
DC Power Input	9-22V, 1.5A
PoE Support	First Ethernet Port, 9-22V, 1.5A, Passive Ethernet (Power over Ethernet injector included, pairs 4,5+; 7,8 return)
LEDs	Power, 2 x Ethernet LAN, Wireless WAN

Regulatory Compliance

	CE mark, ETSI EN 300 328 Compliant, FCC Part 15 Compliant

Warranty

	12 Months, Limited