3G Marine Outdoor WiFi Router

The NetComm Wireless 3G Marine Outdoor Router (NTC-30WV-02) is designed to weather the harsh marine environment. The all-in-one device can be installed at a marina or on the exterior of a motor yacht or cruiser to deliver a powerful 3G broadband Internet and phone connection offshore.

NTC-30WV-02
Specification Sheet

3G Marine Outdoor WiFi Router
Overview

Designed to deliver the Internet and phone connectivity that you expect on land at sea, the 3G Marine Outdoor Router is positioned on the exterior of motor yachts or cruisers to optimise signal strength at a remotely located marina or within line of sight of the coast to deliver high-speed 3G broadband, WiFi, Ethernet and phone connectivity to yacht owners and their guests.

QUICK FACTS

- Rugged outdoor router for deployments in harsh marine environments

- Powerful 3G/HSPA+ modem for high-speed Internet connectivity reaching 21Mbps downlink and 5.76Mbps uplink

- Compatible with global mobile networks

- Dust and water tight to withstand extreme marine weather conditions - IP67 rated housing

- Features an 802.11n WiFi access point with 2x2 MIMO antenna technology to deliver Wi-Fi connectivity spanning up to 100 metres

- Connect a wired device using the Fast Ethernet (100Mbps) port which supports Power over Ethernet

- Create and install custom applications using the embedded Linux operating system

- Supports remote diagnostics, configuration and firmware upgrade capabilities

- Includes built-in VPN clients for a secure connection over a public mobile network

- Make circuit switched phones calls using the RJ11 voice port

- Easy and secure stainless steel wall or pole mounting options

To provide a complete communications solution on the water, the NTC-30WV-02 combines a modem, router, wireless LAN access point, telephone adapter and powerful high gain antenna system in a single weather-resistant device that is easily mounted on an external mast, wall or pole to deliver a fast and reliable Internet and phone connection.

EVOLVED HIGH-SPEED PACKET ACCESS (HSPA+)
The NTC-30WV-02 offers an ideal solution to both yacht owners and marina managers. The device attaches to the outside of the marina, yacht or cruiser to boost 3G/HSPA+ signal strength in low signal areas and coastal seas within line of sight of the coast. The embedded 3G modem delivers data download rates of up to 21Mbps (HSPA+) which can be shared via a secure and reliable WiFi and Ethernet network.

MULTIPLE DEVICE CONNECTIVITY
The device creates an expansive WiFi network. With access to an integrated Wireless LAN access point and MIMO antenna technology, a reliable 802.11n WiFi signal reaching wireless N speeds of up to 300Mbps is transmitted over a radius of up to 100 metres from the router.

EXTREME OUTDOOR DURABILITY
The sturdy, water and rust proof NTC-30WV-02 is IP67 rated and proven to withstand severe environmental conditions including extreme temperatures and salt water exposure to ensure durability and longevity in harsh marine environments.
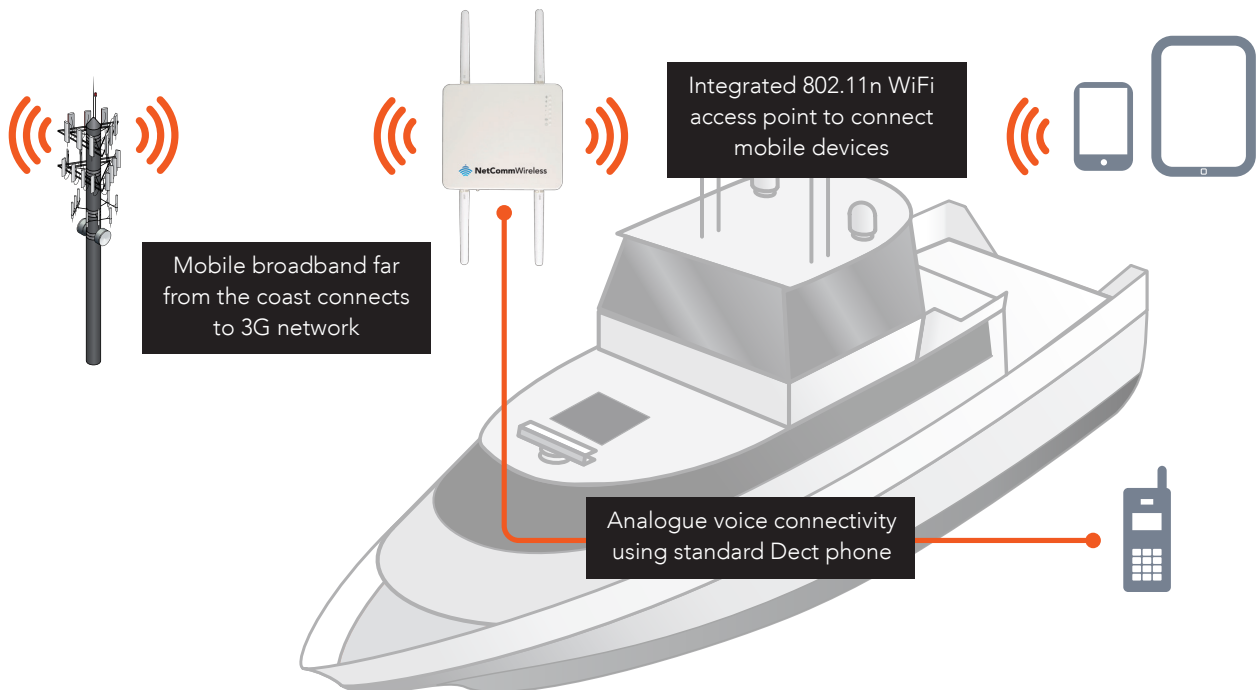
ADVANCED REMOTE MANAGEMENT
Designed to provide remote diagnostics, configuration and firmware upgrade capabilities, the NTC-30WV-02 allows a range of issues to be diagnosed and resolved over the air without requiring a marine technician onsite to upgrade firmware or to check the network connection status, WiFi and device settings.

Application Example
Mobile broadband connectivity to a fly bridge cruiser

Integrated 802.11n WiFi access point to connect mobile devices

Mobile broadband far from the coast connects to 3G network

Analogue voice connectivity using standard Dect phone

Device Features
At a glance

1. High performance 3G antenna connectors
2. WiFi antenna connectors
3. SIM card slot (for USIM/SIM 2FF format)
4. Mini USB 2.0 port
5. Reset button
6. DC Power connector
7. Phone port
8. Fast Ethernet LAN port (supporting Power over Ethernet)
9. IP67 rated housing

Package Contents
What's in the box?

1 x NetComm Wireless 3G Marine Outdoor Router (NTC-30WV-02)

2 x Stainless steel 3G Antennas

2 x Stainless steel WiFi Antennas

1 x 10m DC power cable (open ended)

1 x Stainless steel pole mounting kit

1 x Stainless steel wall mounting kit

2 x Cable glands

1 x Ferrite core

1 x WiFi security card

1 x Quick start guide

Technical
Specifications

MEMORY
- 128MB DDR SDRAM | 256MB NAND Flash

OPERATING SYSTEM
- Embedded Linux 2.6

PEAK DATA SPEED
- Downlink: 21Mbps (HSDPA Cat. 14); Uplink: 5.76Mbps (HSUPA Cat. 6);

CELLULAR BANDS
- UMTS/HSDPA/HSUPA: 850/900/2100/1900 MHz
- GSM/GPRS/EDGE: 850/900/1800/1900 MHz

WIRELESS LAN
- IEEE 802.11b/g/n 2T2R
- Frequency: 2.4 ~ 2.438GHz
- Peak Data Rate: Max 300 Mbps (MIMO, WPA2)
- Wireless Security
  - WEP 64-bit
  - WEP 128-bit
  - WPA
  - WPA2
  - WPAPSK
  - WPA2-PSK
  - TKIP
  - AES
  - Multiple SSIDs

CONNECTIVITY
- 1x (RJ45) Ethernet 10/100Base-TX Port with AutoMDIX
- 1x Mini USB 2.0 Console Port
- 1x DC-in Port
- 1x FXS (RJ11) Phone Port

ANTENNA INTERFACES
- 2x N-Type Cellular (3G)
- 2x N-Type WLAN (MIMO)

SIM CARD READER
- Sealed Tray Reader
- Push-Button-to-Release
- Mini USIM/SIM Format

LED INDICATORS
- Power
- Data Carrier Connection
- Signal Strength

REMOTE MANAGEMENT
- LWM2M
- TR-069
- SNMP v1/v2
- Web-based User Interface (HTTP)
- Telnet / SSH
- Event notification feature providing ability to send alerts to SMS, E-mail, TCP/UDP server when certain system events occur

LAN
- DHCP Server/Client/Relay
- Static Route

WAN
- WWAN (Cellular)
- PPPoE
- PPP (PAP/CHAP)

ROUTING & POSITIONING
- Static
- RIP (v1/v2)
- VRRP
- Dynamic DNS
- NAT
- DMZ
- Data Stream Manager providing ability to create mappings between input and output ports and perform required translation or data processing by each virtual tunnel

TELEPHONY
- Circuit-Switched Voice via Standard/Cordless Analogue Telephone

FIREWALL & SECURITY
- SPI Firewall
- Anti-DoS

VPN
- IPSec
- PPTP
- GRE
- OpenVPN

ENVIRONMENT
- Normal Operating Temperature: -20°C ~ +65°C
- Extended Operating Temperature: -25°C ~ +75°C (with Performance Deviations)
- IP-67 Rated Housing (sealed against water and dust)

POWER SUPPLY
- DC In port: 8 ~ 28 V with external power supply
- Power over Ethernet using external PoE injector (not supplied)

POWER CONSUMPTION
- Standby Input Current: 110 mA @ 12V DC
- 3G Active Input Current: 300 mA @ 12V DC
- Maximum Input current: 560 mA @ 12V DC

DIMENSIONS & WEIGHT
- 255mm (L) x 240mm (W) x 80mm (D)
- ~2345g (including mounting and antennas)

MAXIMUM OUTPUT POWER ALOWED
- WLAN Module ERP = <20 dBm