



PRODUCT PORTFOLIO
3G / 4G WIRELESS M2M DEVICES

NetComm Wireless is
a leading Australian
owned and operated
developer of innovative
broadband technologies.

Since its establishment 30 years ago, NetComm has provided businesses, enterprises and governments with leading broadband networking products designed to meet the latest requirements of modern telemetry, Machine-to-Machine (M2M) communication, WAN and legacy serial applications.

NetComm's Wireless M2M division specialises in the development of advanced industrial-grade and commercial wireless broadband products and solutions for business continuity (disaster recovery), primary mobile broadband and remote M2M connectivity.

NetComm Wireless M2M products, solutions and services are designed to support resource hungry applications in areas such as transport, metering, security, surveillance, banking, health and mining.

NetComm Wireless M2M rugged mobile broadband products provides cost-effective high-performance data communication for virtually any challenging application using a 3G or 4G network.

Ready for Future Growth

M2M communication describes automatic data communication between devices such as electric meters, digital displays, vending machines, alarm systems and vehicles. By linking these via M2M devices and 3G/4G wireless with central data terminals or more complex back-end systems they can exchange data, be monitored and even serviced across the globe.

With a constantly evolving product portfolio **NetComm Wireless M2M** remains at the forefront of wireless M2M technology with customised solutions that enable remote tracking and real-time monitoring as well as mobile access to the Internet and corporate network data. Dual system management allows upgrading of the router's firmware remotely to maximise reliability and reduce the total cost of ownership.

NetComm Wireless M2M products are easily installed and integrated into existing enclosures, featuring browser-based device management, routing, Internet and security protocols in addition to software customisation, hardware development and project management solutions to meet specific requirements.

Ideal for use in remote and unmanned locations

NetComm Wireless M2M routers and modems build Wide Area Networks utilising the superior speeds supported by 3G/4G networks. Designed with a focus on remote installation, reliable backup and simple setup, NetComm Wireless M2M routers and modems support multi-level system monitoring to keep communication lines up and open in any conditions.

End-to-End Control

Control your communications with remote monitoring, management, reporting, security and real-time connections while benefiting from the ability to select your preferred service provider and carrier.

Tailored To Your Needs

Take advantage of integrated software customisation capabilities (Embedded Linux, SDK); browser based device management; multiple routing protocols and the development of hardware, custom firmware and project management solutions to meet your specific requirements.

Increased Performance Benefits

Technologies strategically aligned with the evolution of 3G/4G telecommunications networks have been engineered for mobility and easy relocation, improving productivity, simplifying logistics and enhancing your business operations. NetComm Wireless' remotely managed industrial-grade 3G M2M routers are designed for easy installation and integration into existing machines for reliable Internet connectivity without the restrictions of landline availability.

Comprehensive Pre-Sales and Technical Support

A dedicated local team of NetComm Wireless support engineers and developers ensures you receive a superior pre-sales and after-sales technical support. It comprises troubleshooting, integration support and on-site customers visits (on a case by case basis) and furthermore the provision of value-added services (e.g. fixed IP addressing) and application development services.

Robust and Secure

Designed to withstand the harsh environmental conditions NetComm Wireless' industrial M2M products have been meticulously tested for demonstrated performance under extreme temperature conditions. All products in the range have been designed for durability to ensure a long product lifespan while offering highly advanced security features.

Reach Customers Faster

Advanced technology components have been engineered for the rapid design, development and deployment of wireless M2M product solutions that provide uninterrupted mobile and remote access to email, the Internet and corporate network data to ensure customer satisfaction.

NTC-6200 SERIES

3G M2M ROUTER PLUS



- Penta-band 3G with quad-band 2G auto-fallback
- HSPA+ up to 14.4 Mbps DL
- 1 x 10/100 Ethernet port
- Full passive Power over Ethernet (PoE) support (802.3af)*
- RS232/RS422/RS485 Port and USB 2.0 OTG port
- Built in GPS supporting an active GPS Antenna via external SMA connector
- Three multi-purpose I/O ports
- One dedicated ignition input
- Intelligent, Tri-Colour LED display for clear, easy to read modem status information
- Extensive device management with support for TR-069, Web GUI and full feature management with SMS
- Flexible mounting suitable for in-home use or industrial applications with built-in wall mount and DIN rail mounting options
- Integrated ZigBee multipoint mesh wireless networking*

The NetComm Wireless 3G M2M Router Plus (NTC-6200) is an intelligent penta-band 3G and quad-band 2G M2M Router designed for a broad range of Machine-to-Machine (M2M) applications.

Featuring Ethernet, Serial (RS232/422/485), and USB 2.0 connectivity, the NTC-6200 series can interface with a diverse range of equipment used in a wide variety of vertical applications. The NTC-6200 also features built in GPS support and a dedicated ignition input making it ideal for vehicle applications. The device features integrated Zigbee with embedded antennas for multipoint wireless networking and multipurpose digital and analogue I/O ports. The router's open Linux operating system and Software Development Kit (SDK) offers the capability to install custom software applications within the substantial onboard flash memory.

The routers also allow full remote system monitoring, remote diagnostics, remote configuration and firmware updates over the air. The NTC-6200 series is designed with durability in mind. Its compact rubberised case design has flexible mounting options and has been tried and tested in extreme applications to ensure users can enjoy a reliable and long product life-span.

APPLICATIONS

Point-to-point or point-to-multipoint machine-to-machine IP connectivity. Controlling and monitoring of connected machines from remote locations. Collection and analysis of data from connected machines. Commercial and Industrial deployments in harsh environments.

** Features available on NTC-6200-01/11 only*

HARDWARE SPECIFICATIONS



CONNECTION EXAMPLE



NTC-3000 SERIES

M2M SERIAL MODEM



- Small sized, industrial-grade 2G/3G modem
- Provides RS232 serial data connectivity and power via RJ45 port
- Supports standard and extended AT command set
- Embedded Internet and security protocol stacks
- Wide input voltage range: 5-36V DC
- USB 2.0 console port for serial connection from a Windows computer
- DIN rail and wall mount option

The NTC-3000 series is a reliable and cost effective 2G/3G modem designed for deployment in a wide range of telemetry applications. Suitable as a modern day dial-up-modem replacement, this device is designed to interface primarily with machines that require basic serial data transfer and is ideal for connecting multiple machines using the 2G/3G network.

The NTC-3000 series uses AT commands to communicate and facilitates data connectivity from machines to any other IP network enabled device using mobile broadband, thereby facilitating remote monitoring, control, reporting and management of machines.

The small and compact modem is designed with a lockable SIM tray for security in unmanned locations and a DIN rail clip for various mounting options.

APPLICATIONS

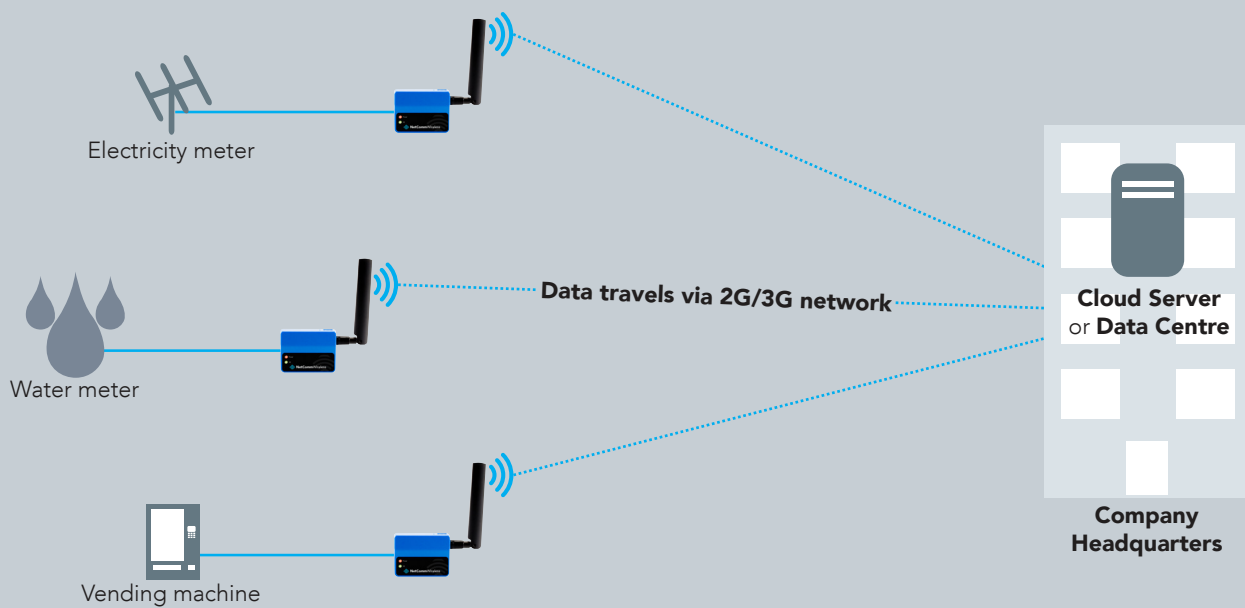
The NTC-3000 Series M2M Serial modems are the most economical of their kind and ideal for connecting multiple machines cost effectively to a reliable and secure communications network.

Perfect for M2M applications that require the Internet to collect data from machines such as meters, irrigation controllers and data collection terminals, or for a wide variety of other applications where serial based devices require dial-up access to the internet, via a wireless rather than a fixed line internet service.

HARDWARE SPECIFICATIONS



CONNECTION EXAMPLE



NTC-40WV

3G WIFI M2M ROUTER WITH VOICE



- Industrial-grade M2M router with extended temperature tolerance
- 802.11n WiFi access point with 2x2 MIMO antenna technology
- 1 x 10/100 Ethernet port
- Embedded Linux operating system allowing for the installation of custom applications
- Remote diagnostics, configuration and firmware upgrade capabilities
- Built-in VPN clients for a secure connection over a public cellular network
- Flexible DC power input to suit diverse installation environments
- 1 x RJ-11 voice port for circuit switched phones calls

The NTC-40WV is an intelligent all-in-one 2G / 3G M2M router with WiFi capabilities. Designed for a broad range of M2M applications, the router connects to the superior speeds of either a 21Mbps 3G network or 2G network to send and receive data to and from machines.

Combining the coverage of mobile networks and the device's high speed Ethernet port, the NTC-40WV routers creates point-to-point or point-to-multi-point communication, enabling the secure collection and analysis of data from remote and unmanned locations.

The device's powerful processor delivers optimal performance and its embedded Linux OS and Software Development Kit (SDK) offers the end user the capability to install custom firmware to the onboard flash memory. Built in VPN clients also ensure a secure connection over a public mobile network.

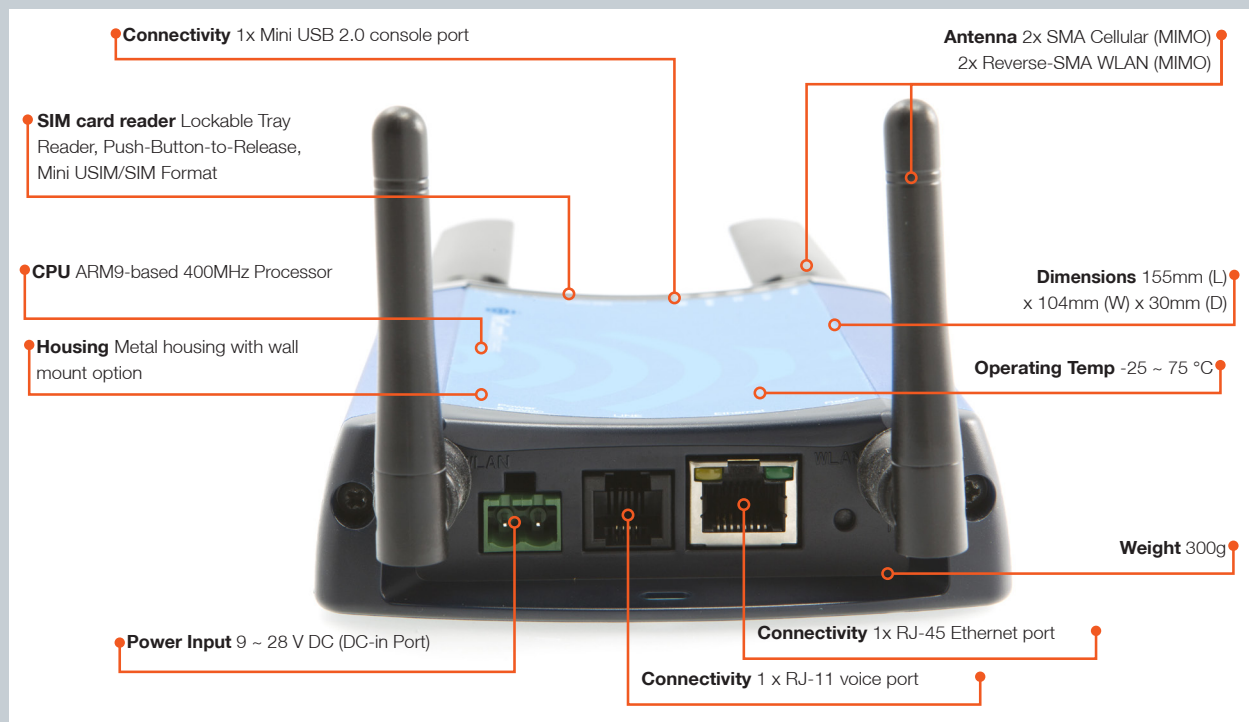
Its solid metal housing is mountable, designed for rugged deployments and also features temperature tolerances making it ideal for remote and industrial environments.

APPLICATIONS

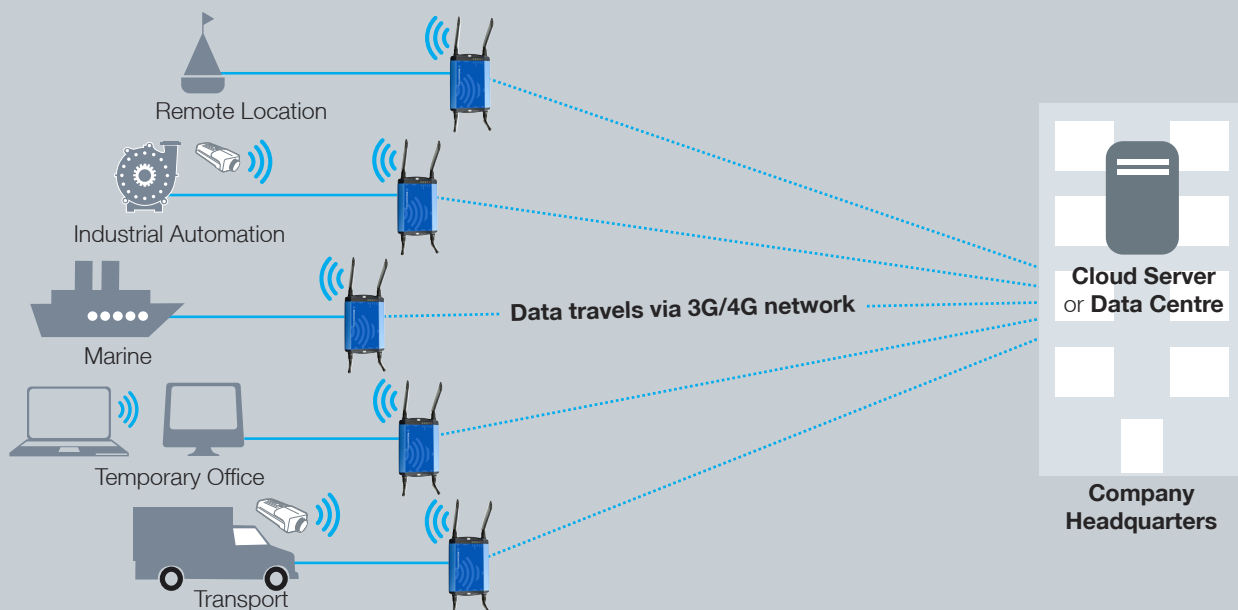
The NTC-40WV is feature packed and designed to integrate into most M2M applications such as primary broadband, video surveillance, temporary office set ups, in-vehicle wireless hotspot and for business continuity requirements.

Its capability to download data of up to 21Mbps over 3G networks makes it ideal for M2M applications that require the transfer of fast and reliable data. The device's software capabilities also extend its ability to integrate into any existing solution, making the NTC-40WV one of NetComm Wireless' flagship products.

HARDWARE SPECIFICATIONS



CONNECTION EXAMPLE



NTC-140W

4G WIFI M2M ROUTER



- Powerful and flexible industrial cellular router platform supporting LTE with fallback to 3G/UMTS and GSM/GPRS/EDGE
- Industrial Features – rugged enclosure, wide operating temperature range, wall mount option and a flexible range of power options
- Embedded Linux operating system allowing for the installation of custom applications. Software Development Kit (SDK) is available
- 2 x 10/100/1000 Base T ports for Ethernet connection
- VPN support for establishing a secure connection over public cellular network using OpenVPN
- Supports SNMP with cellular specific MIB, PPPoE, RIP, VRRP, DDNS, MAC /NET address filtering, Open VPN, DHCP/DHCP relay
- System monitoring, remote diagnostics and configuration over the air, diagnostic log viewer via browser
- 802.11n WiFi access point with 2x2 MIMO antenna technology
- Integrated GPS support
- TR-069 device management
- Ignition Sense capability for graceful shutdown and startup in vehicle applications
- Tested for vehicular applications IEC Class 5M2 and MIL-STD-810F Method 516.5

The NetComm Wireless 4G WiFi M2M Router (NTC-140W) utilizes the speed and performance capabilities of a 4G/LTE network to deliver seamless M2M connectivity for a broad range of M2M applications. The NTC-140W features two Gigabit Ethernet ports and high speed WiFi connectivity making it an ideal device for high speed networking. The device also features vehicle voltage support (ISO 7637-2), GPS and Ignition input making it ideal for mobile asset and transportation applications.

The NTC-140W creates point-to-point and point-to-multi-point communication, enabling the secure collection and analysis of data from remote and unmanned locations.

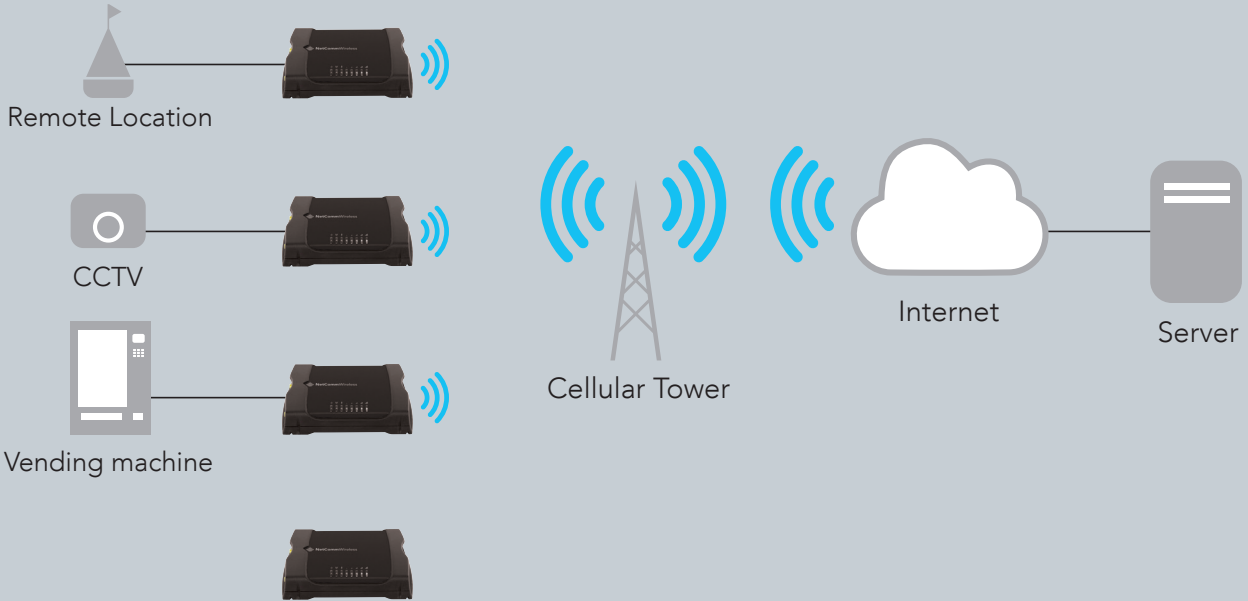
The NTC-40W's powerful processor delivers optimal performance and its embedded Linux OS and Software Development Kit (SDK) offers the end user the capability to install custom firmware to the onboard flash memory. Built in VPN clients also ensure a secure connection over a public mobile network.

Its polycarbonate and rubber enclosure is mountable, designed for rugged deployments and also features temperature tolerances making it ideal for remote and industrial environments. The device also features 1 x I/O and USB OTG.

HARDWARE SPECIFICATIONS



CONNECTION EXAMPLE



NTC-30WV

3G OUTDOOR WIFI ROUTER WITH VOICE



- Industrial-grade outdoor router for deployments in remote environments and industrial applications
- IP67 and environmentally rated housing to withstand extreme weather conditions
- 802.11n WiFi access point with 2x2 MIMO antenna technology
- 1 x 10/100 Ethernet port with Power over Ethernet
- Embedded Linux operating system allowing for the installation of custom applications
- Remote diagnostics, configuration and firmware upgrade capabilities
- Built-in VPN clients for a secure connection over a public cellular network
- 1 x RJ-11 voice port for circuit switched phones calls

The NTC-30WV 3G Outdoor WiFi Router with Voice is designed to connect homes and businesses to the speed and coverage of 3G networks to deliver high speed broadband to individual premises.

The device is ideal for remote locations without a fixed (ADSL/Cable/Fibre) broadband connection or locations in a low signal strength area. This highly featured all-in-one router integrates a 3G modem, router, WiFi, voice and high gain antennas into one robust weatherproof device.

The NTC-30WV 3G Outdoor WiFi Router with Voice allow users to connect their premises to high speed broadband and share this connection via a fixed Ethernet connection or via a powerful WiFi network. With the integrated 802.11b/g/n Access Point and MIMO antenna technology, the router provides reliable and wide reaching WiFi coverage for both indoor and outdoor wireless access.

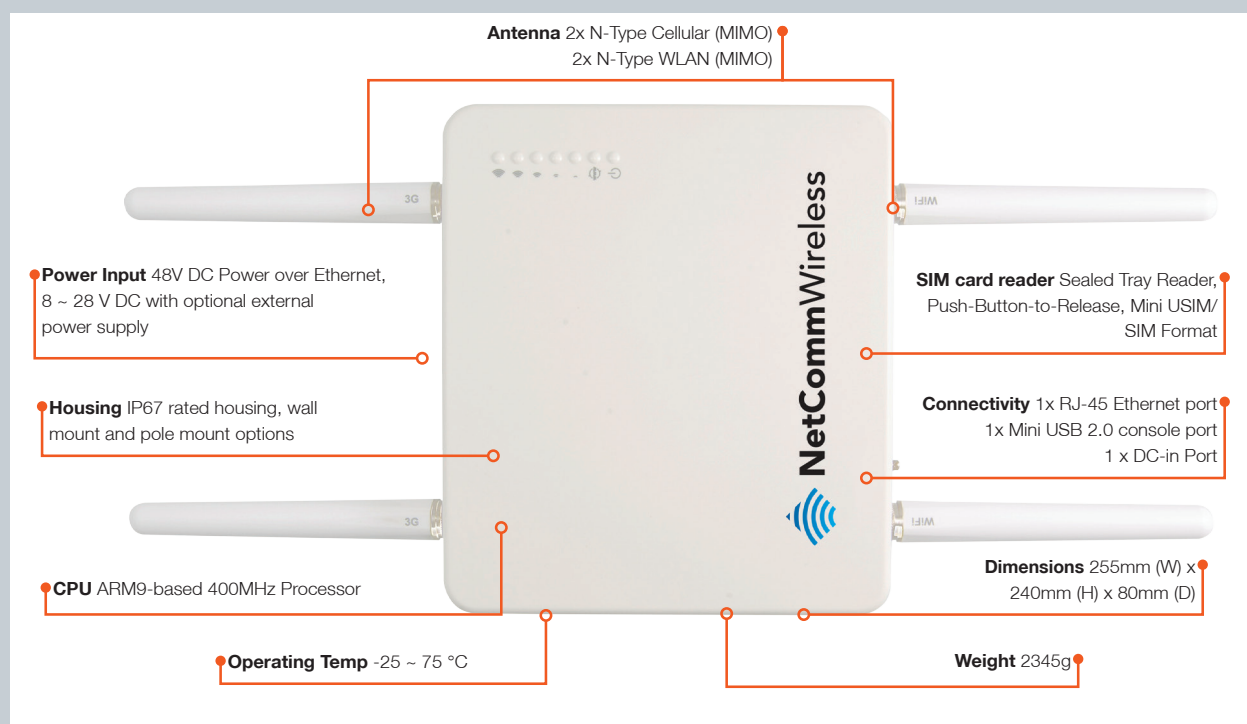
The weatherproof NTC-30WV 3G Outdoor WiFi Router with Voice is also designed to be mounted either on a wall or pole on the outside of your premises, and its IP67 rating ensures your router will withstand harsh climates including dust, rain and extreme temperatures.

APPLICATIONS

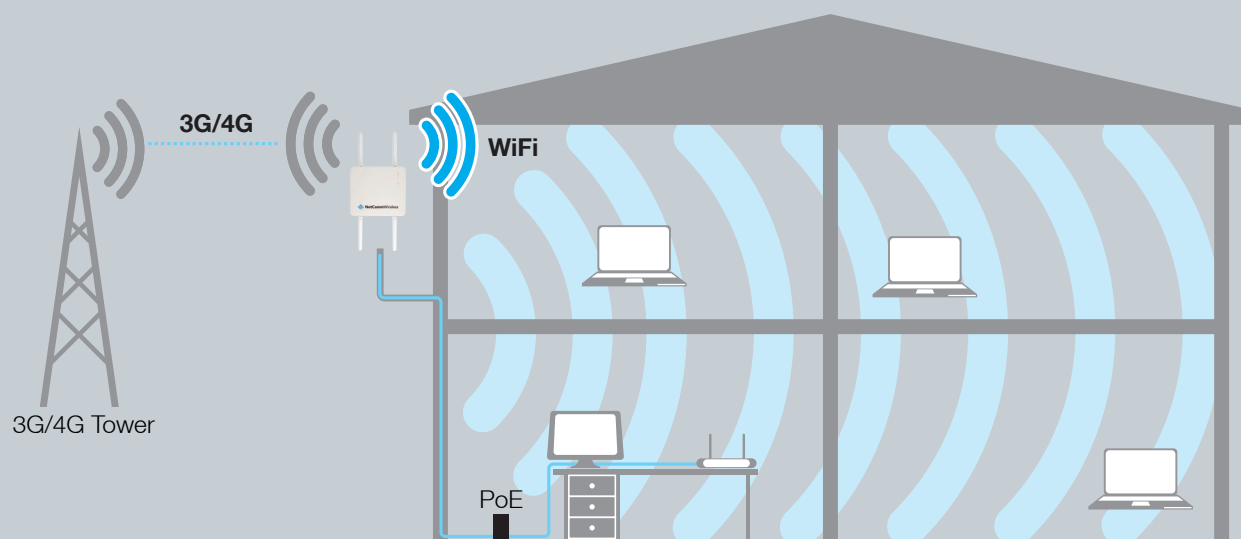
NetComm's NTC-30WV 3G Outdoor WiFi Router with Voice is designed for:

- Rural broadband initiatives
- Homes and businesses that cannot access a fixed line (ADSL/Cable) connection
- People with a slow internet connection
- Anyone who requires an internet connection for either a mobile application (e.g. boat) or a temporary business set up
- Properties seeking to migrate from dial-up Internet to broadband Internet

HARDWARE SPECIFICATIONS



CONNECTION EXAMPLE



APPLICATIONS

MINING & RESOURCES



USES

- Conveyor control monitoring
- Gas detect communication
- Failover for monitoring systems
- Machine temperature and vibration reporting

AGRI/WATER



USES

- Rainfall data logging
- Soil moisture monitoring
- Irrigation control
- Fuel tank monitoring
- Generator monitoring
- Livestock/poultry alerts
- River health monitoring

BUSINESS SERVICE



USES

- Vending machines
- Recycling/waste bin levels
- Gaming machines
- Digital signage
- Market research
- Machine maintenance

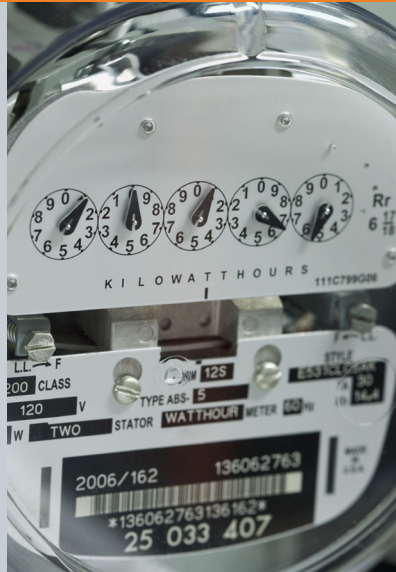
EMERGENCY & HEALTH



USES

- Mobile health units
- Emergency response
- Smart homes
- Remote patient monitoring
- Flood warning systems

UTILITIES



USES

- Metering
- Grid management
- Smart homes
- Irrigation control
- Carbon forecasting
- Generator management

MANUFACTURING & CONSTRUCTION



USES

- Remote troubleshooting
- Supply chain management
- Energy management
- Building control
- Security

Products **at a glance**

Model	NTC-140W	NTC-30WV	NTC-40WV	NTC-3000	NTC-6200-02
Radio	4G / LTE	3G	3G	3G/GPRS	3G
Outdoor IP-67	–	Y	–	–	–
WiFi	Y	Y	Y	–	–
Router	Y	Y	Y	–	Y
Serial Interface	–	–	–	Y	Y
Ethernet	x 2	x 1	x 1	–	x 1
I/O	x 1	–	–	–	x 3
Voice	–	Y	Y	–	–
GPS	Y	–	–	–	Y
PoE	–	Y	–	–	–
Module	-40°C to +85°C	-25°C to +75°C	-25°C to +75°C	-40°C to +85°C	-40°C to +85°C
Manufacturer's Recommended Operating Temp					
Remote Mangnt	Y	Y	Y	–	Y
Linux OS / SDK	Y	Y	Y	–	Y

Custom design & development. Bringing your ideas to life.

Connection methods, data usage, applications and desired features vary drastically between personal, business and industrial users worldwide. With the explosion of M2M connectivity – a one-size-fits-all approach to the development of broadband technologies is no longer viable.

Whether you're looking to design and develop a new product from the ground up, or to test and improve an existing product, our team of internal R&D engineers specialise in developing purpose-built HSPA+ and LTE Machine-to-Machine (M2M) technologies in line with your specifications.

We have the project management; testing and support; software product development; hardware product development and technical capacity needed to bring your ideas to life, on time and on budget.

The end-to-end product development process takes place in our Sydney design centre to: reduce risk, ensure maximum control over systems integration, support timely product development and guarantee thorough testing for superior performance results.

Whatever your goal, NetComm Wireless is here to help you achieve it.



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