

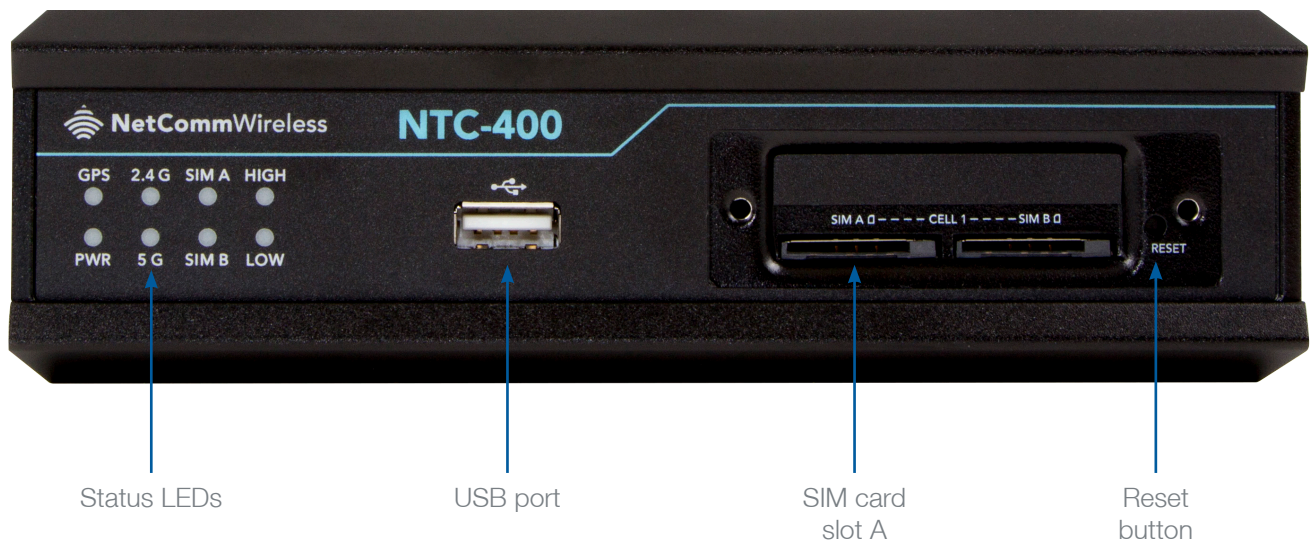


# NTC-400 Series

4G LTE Cat 6 Industrial IoT Router with Dual Band Wi-Fi

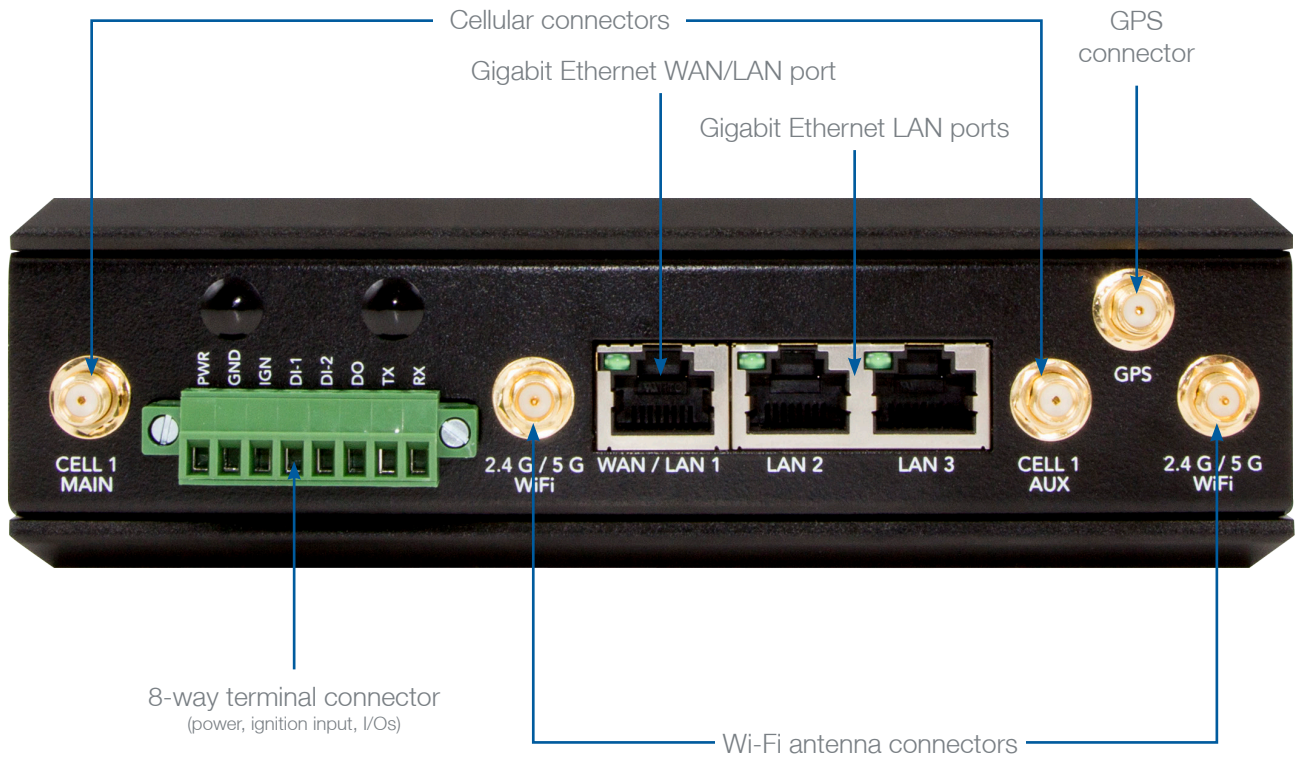


# Device Features



## Key Features

- Cat 6 4G LTE (300 Mbps) and dual band Wi-Fi for high speed applications
- Three Gigabit Ethernet ports, a serial port, and a USB port for network flexibility
- Integrated GPS compatible with all global systems for reliable tracking applications
- I/O ports to read sensors or remotely control equipment such as lights, fans or pumps
- Rugged industrial design with a metal housing and a wide temperature rating for harsh environments
- Ignition sense capability and a wide input voltage range for vehicular applications



## What's in the box



1 x NetComm Wireless NTC-400 Series Router



2 x Wi-Fi antennas



2 x Cellular antennas



2 x Wall mounting brackets



4 x Wall mounting bracket screws



1 x 8-way terminal connector



1 x Quick start guide

# Optional Accessories



GPS Active Patch Antenna  
**ANT-0038**

## SPECIFICATIONS

- Frequency range: 1575.42 MHz
- Gain: 28 dBi (GPS)
- VSWR: 1.92:1 MAX
- Polarization: R.H.C.P.
- Cable: RG174
- Cable length: 3 m
- Impedance: 50  $\Omega$
- Voltage: 3.3-5.5 V
- Connector: SMA male
- Radome colour: Black
- Radome material: ABS



12V DC Power Supply  
**PSU-0060**

## SPECIFICATIONS

- International Efficiency Level VI Power supply
- No-Load Power Consumption: 0.1 W (115 VAC 60 Hz)
- Average Efficiency in Active Mode: 85% (115VAC 60Hz)
- Maximum input voltage range: 90 - 264 V AC (100 - 240 V AC Normal)
- Maximum input frequency range: 47 - 63 Hz (50/60 Hz Normal)
- Output voltage range: 11.4 - 12.6 V DC (Typical 12 V DC)
- Maximum output current: 1.5 A
- Maximum ripple and noise: 150 mV peak to peak
- Maximum output overshoot: 10%
- Protection against Over-Voltage, Over-Current and Short-Circuit
- Temperature range: 0°C - 40°C (Operating), -30°C - 70°C (Storage)
- Relative humidity range: 10% - 90%
- Altitude range: Sea level to 2,000 m
- Suitable regions: US/UK/EU/AU/SA/TW/CH/JP
- Safety certifications: UL60950-1, CSA C22.2 NO.60950-1, EN60950-1, AS/NZS 60950, GB4943, J60950, IEC 60950-1
- Lead length: 1.5 m

# Technical Specifications

## CELLULAR BANDS

### NTC-402

- LTE Bands:
  - Band 1 (2100 MHz)
  - Band 3 (1800 MHz)
  - Band 5 (850 MHz)
  - Band 7 (2600 MHz)
  - Band 8 (900 MHz)
  - Band 18 (850 MHz)
  - Band 19 (850 MHz)
  - Band 21 (1500 MHz)
  - Band 28 (700 MHz)
  - Band 38 (2600 MHz)
  - Band 39 (1900 MHz)
  - Band 40 (2300 MHz)
  - Band 41 (2500 MHz)
- WCDMA Bands:
  - Band 1 (2100 MHz)
  - Band 5 (850 MHz)
  - Band 6 (800 MHz)
  - Band 8 (900 MHz)
  - Band 9 (1700 MHz)
  - Band 19 (800 MHz)
- TD-SCDMA Bands:
  - Band 39 (1900 MHz)

## PEAK DATA SPEED

- 300 Mbps downlink
- 50 Mbps uplink
- LTE Category 6

## ANTENNA CONNECTORS

- 2 x SMA connectors for 3G/4G antennas
- 1 x SMA connector for active GPS antenna
- 2 x Reverse SMA connectors for Wi-Fi antennas

## ANTENNAS

- 2 x Dual band Wi-Fi antennas
  - 3 dBi gain @ 2.4 GHz
  - 5 dBi gain @ 5 GHz

## INTERFACES

- 3 x 1000 Base-T Ethernet RJ45 port
  - 1 x LAN/WAN port
  - 2 x LAN ports
- Concurrent Dual Band Wi-Fi with 802.11n 2T2R (2.4 GHz) and 802.11ac 2T2R (5 GHz)
- I/O terminal block providing:
  - 1 x RS-232 Serial (TX and RX only) interface via I/O terminal block
  - 2 x Digital input
  - 1 x Digital output
  - 1 x Ignition sense
- 1 x USB port

## GPS

- GPS
- GLONASS

## SIM CARD READER

- 1 x SIM card slot

## WI-FI FUNCTIONS

- Wi-Fi Operation
  - AP Router
  - WDS
  - WDS Hybrid Modes
- Wi-Fi Security
  - WEP
  - WPA
  - WPA2
  - WPA-PSK
  - WPA2-PSK
  - 802.1x

## WAN FUNCTIONS

- 3G/4G WAN
- 3G/LTE IPv4, IP Passthrough
- Wi-Fi WAN

## NETWORK & ROUTING

- Routing
  - Static & Dynamic routing
  - RIP (v1/v2)
  - OSPF
  - BGP
- Port forwarding
  - Virtual server/computer
  - DMZ Host
  - Special AP & ALG
  - PPTP/L2TP/IPSec Passthrough
- QoS
  - Policy-based Bandwidth Control
  - Packet Flow Prioritization
- VLAN
  - Port-based
  - Tag-based



## SECURITY

- VPN Tunnelling
  - PPTP
  - L2TP
  - GRE
  - IPSec tunnel termination (for up to 8 tunnels)
  - OpenVPN
- VPN Scenario (dependent on VPN Tunnel type)
  - Site to Site
  - Site to Host
  - Host to Site
  - Host to Host
  - Hub and Spoke
  - Dynamic VPN
  - Tunnelling with Full Tunnel
  - Tunnel Failover
- Firewall
  - SPI Firewall with stealth mode, IPS
  - Access Control
  - MAC Address Control
  - URL Blocking
  - Packet / Content Application Filters
- Authentication
  - Captive Portal
  - MAC Authentication

## FIELD COMMUNICATION

- Virtual COM
  - RFC 2217
  - TCP Client
  - TCP Server
  - UDP Server
  - UDP Client

## SERVICE

- Cellular toolkit
  - SMS
  - Data Usage
  - SIM PIN
  - USSD
  - Network Scan
- Event notification / triggering
- Location tracking
  - GPS
  - Track Viewer
- Power control
  - Ignition sense
  - Low voltage sense

## ADMINISTRATION

- Configuration and Management
  - Web interface
  - Telnet CLI
  - SSH CLI
  - Command script
  - TR-069
  - SNMP (v1/v2/v3)
- System Operation
  - MMI
  - System Information
  - System Time
  - System Log
  - Backup and Restore
  - Reboot and Reset
- FTP
  - FTP Server/SFTP
  - User Account
- Diagnostic
  - Packet Analyzer
  - Diagnostic Tools

## STORAGE AND LOGGING

- 1 x USB port
- 1 x Embedded 8GB storage

## POWER

- Power input range
  - DC 9 V – 36 V

## DIMENSIONS

- Without mounting kit
  - 160 mm (L) x 125 mm (W) x 47 mm (H)
- With mounting kit
  - 200 mm (L) x 125 mm (W) x 50 mm (H)

## ENVIRONMENTAL

- Operating temperature range
  - -30 °C – 70 °C
- Storage temperature range
  - -40 °C – 85 °C
- Humidity
  - 10% – 95% (non-condensing)

## CARRIER APPROVALS

- Telstra
- Spark

## REGULATORY CERTIFICATIONS

- RCM (Australia / New Zealand)
- Wi-Fi Alliance
- RoHS
- E-Mark



# Listen. Innovate. Solve.

For over 35 years, NetComm Wireless has engineered new generations of first to market technologies and helped to change the way that the world communicates.

Innovation comes from our people. Working together, from all parts of the globe, we listen to our customers and achieve innovation through a unique understanding of the challenges and opportunities of a connected world.

No matter the challenge, we look at the world through the eyes of our operator partners and customers and innovate solutions engineered to deliver lasting results in line with specific business needs.

Whether transforming rural and regional communities with superfast Fixed Wireless; optimising business efficiencies with smart wireless Machine-to-Machine (M2M) solutions, or extending network infrastructure with Fibre or Cable to the distribution point – NetComm Wireless is backed by the experience, expertise and capabilities needed to optimise outcomes.