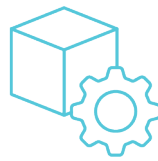


4G LTE CAT M1/ NB1 INDUSTRIAL IOT SERIAL MODEM

NTC-100



RELIABLE
COST-EFFECTIVE
CONNECTIVITY

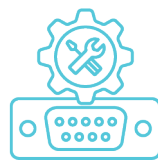


KEY FEATURES

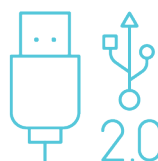
ROBUST INDUSTRIAL DESIGN
for reliable long-term deployment
in harsh environments



DESIGNED FOR
space-constrained installations



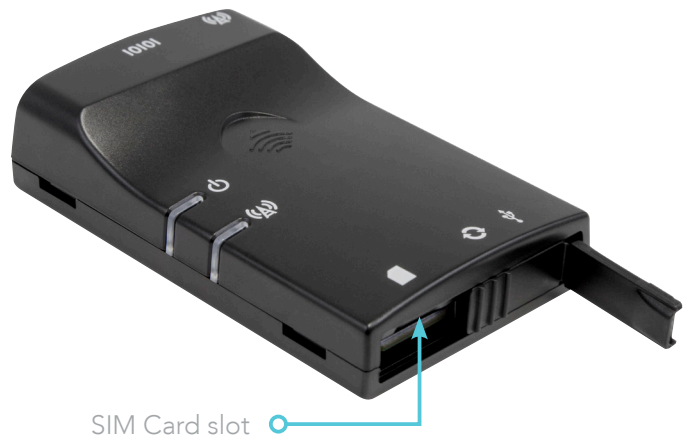
SOFTWARE CONFIGURABLE
serial port (RS232/RS422/RS485)



USB 2.0 device port

DEVICE FEATURES

MEASUREMENTS
in millimeters



WHAT'S IN THE BOX

1 x NTC-100



1 x Y-cable
(Nano-fit to DE-9 and
DC power input)



1 x DIN rail
mounting bracket



1 x Quick start guide



OPTIONAL ACCESSORIES



AC/DC Power Adaptor PSU-0004 - SPECIFICATIONS

- Maximum input voltage range: 90 – 264 V AC (100 - 240 V AC Normal)
- Maximum input frequency range: 47 – 63 Hz (50/60Hz 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 to 40°C (Operating), -30°C to 70°C (Storage)
- Relative humidity range: 10% to 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



LTE Tube Antenna NANT-00001-000 - SPECIFICATIONS

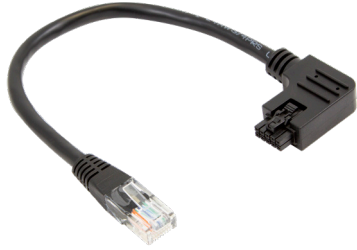
- Frequency (MHz): 698–2700
- Maximum Gain (dBi): 4.71
- VSWR: < 3.0:1
- Polarization: Vertical
- Impedance (Ω): 50
- Max. power input (W): 50
- Connector: SMA



LTE Tube Antenna (for Japan) NANT-00006-000 - SPECIFICATIONS

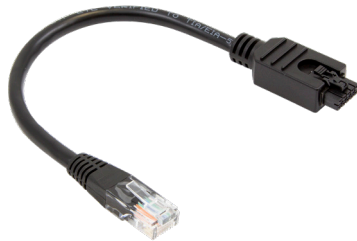
- Frequency (MHz): 698–2700
- Maximum Gain (dBi): 3.24
- VSWR: < 3.0:1
- Polarization: Vertical
- Impedance (Ω): 50
- Max. power input (W): 50
- Connector: SMA

OPTIONAL ACCESSORIES CONT.



MCBL-00039

- RJ45 to 90-Degree Nano-fit
- Length: 250mm



MCBL-00040

- RJ45 to Nano-fit
- Length: 225mm

TECHNICAL SPECIFICATIONS

UE CATEGORY

- › Cat M1/NB1
- › 3GPP E-UTRA Release 13

CELLULAR BANDS

- › **LTE-FDD:**
 - Band 1 (2100 MHz)
 - Band 2 (1900 MHz)
 - Band 3 (1800 MHz)
 - Band 4 (1700 MHz)
 - Band 5 (850 MHz)
 - Band 8 (900 MHz)
 - Band 12 (700 MHz)
 - Band 13 (700 MHz)
 - Band 18 (850 MHz)
 - Band 19 (850 MHz)
 - Band 20 (800 MHz)
 - Band 28 (700 MHz)
- › **LTE-TDD:**
 - Band 39 (1900 MHz, Cat. M1 only)
- › **EGPRS:**
 - 850 MHz
 - 900 MHz
 - 1800 MHz
 - 1900 MHz

PEAK DATA SPEED

- › **Cat M1:**
 - 375 Kbps / 375 Kbps (Downlink / Uplink)
- › **Cat NB1:**
 - 32 Kbps / 70 Kbps (Downlink / Uplink)
- › **GPRS:**
 - 107 Kbps / 85.6 Kbps (Downlink / Uplink)
- › **EDGE:**
 - 296 Kbps / 236.8 Kbps (Downlink / Uplink)

ANTENNA CONNECTORS

- › 1 x SMA Connector

INTERFACES

- › 1 x SIM card slot (2FF)
- › 1 x USB 2.0 (Device only)
 - Micro-B receptacle
- › 1 x 10-pin NANO-fit (locking) connector providing Serial interface (RS-232 / RS-422 / RS-485)
 - 15kV RMS Protection

LED INDICATORS

- › 2 x Tri-colour (Red/Amber/Green) LEDs indicating:
 - Power
 - Network

RESET BUTTON

- Recessed reset button with two functions:
 - Reboot
 - Reset unit to factory defaults

MODES OF OPERATION

- › PPP
- › IP
- › Advanced diagnostics and control via SMS
 - Query status information - such as Signal Strength, WAN IP, uptime, and many more
 - Configure device remotely via SMS such as APN, authentication settings, and many more
 - Execute commands via SMS - such as reboot, reset to defaults, go offline, and many more
 - Secure SMS management using sender whitelisting and password protection
 - SMS acknowledgement replies for queries and commands

CELLULAR CONNECTION MANAGEMENT

- › Profile managed packet data connections
- › SIM PIN protection
- › Automatic and manual cellular band selection
- › Automatic and manual operator selection

FIRMWARE MANAGEMENT

- › Firmware upgrade locally via USB or remotely Over-The-Air
- › Triggered firmware upgrade via SMS (initiate download & install from FTP)

POWER SUPPLY

- › Power input via 10-pin NANO-fit connector
- › DC Power input (4.5 – 36 V DC)

POWER CONSUMPTION

- › Idle power consumption: 0.24W (measured under ideal conditions)
- › Full load power consumption: 2W

TEMPERATURE & HUMIDITY

- › Operating temperature range: -30°C to +70°C
- › Storage temperature range: -40°C to +85°C
- › Non-condensing humidity: 5-95% RH @ 60°C

DIMENSIONS & WEIGHT

- › Device dimensions (excluding external antenna): 84 mm (L) x 50 mm (W) x 21 mm (D)
- › Device weight: 55 g (approx.)

MOUNTING OPTIONS

- › Wall mountable via mounting holes
- › DIN Rail mount support via included plastic bracket (Top hat section rail TH 35 IEC60715)

ENCLOSURE

- › IP40 rated

CERTIFICATIONS

- › Approvals: RCM / CE / IC / FCC / GCF / PTCRB
- › Carrier approval: Telstra (NTC-100-01), AT&T (NTC-100-02)
- › Environmental: RoHS2 / REACH / WEEE

HEAD OFFICE AUSTRALIA

NetComm Wireless Limited
18-20 Orion Road, Lane Cove
NSW 2066, Sydney
Australia | +61 2 9424 2070

US OFFICE

NetComm Wireless Limited
1000 Sawgrass Corporate Parkway,
Suite 500 Sunrise, Florida 33323
USA | +1 320 566 0316

UK OFFICE

NetComm Wireless Limited
Eastlands II, London Road,
Basingstoke RG21 4AW, Hampshire
UK | +44 125 622 3155

Trademarks and registered trademarks are the property of NetComm Wireless Limited or their respective owners. Specifications are subject to change without notice. Images shown may vary slightly from the actual product.