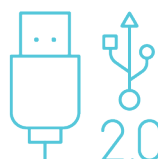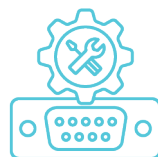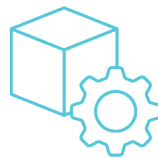# 4G LTE CAT M1/ NB1 INDUSTRIAL IOT SERIAL MODEM

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

LANTRONIX®

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
› Environmental: RoHS2 / REACH / WEEE

OPTIONAL ACCESSORIES

AC/DC Power Adaptor
PSU-0004

LTE Tube Antenna
NANT-00001-000

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

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