

NTC-201 Series

Industrial IoT Cellular Router



4G LTE
CAT 1BIS
INDUSTRIAL
IOT ROUTER



Single-SKU global design enables simplified deployment worldwide delivering dependable LTE Cat 1bis connectivity for critical industrial IoT applications. The NTC-201 ensures ultra reliable, cost effective performance in harsh environments, supported by a secure, diversified supply chain that avoids geopolitical sourcing risks.



WORLDWIDE CONNECTIVITY

Supporting all global 4G LTE bands, the NTC-201 ensures seamless deployment across regions without compatibility concerns. Powered by LTE Category 1bis, it delivers next-generation connectivity—combining reliable performance and cost efficiency for industrial IoT and remote operations.



POWERFUL EDGE PROCESSING

The NTC-201 runs on a robust Linux-based operating system, enabling custom applications built with the Software Development Kit (SDK) to execute directly on the device. This eliminates the need for external industrial computers, reducing complexity and cost while delivering true edge intelligence.



REMOTE MANAGEMENT

Cloud-ready with TR069, MQTT/s, TLS 1.3 support and integration with PercepXion™ for centralized device management. IoT deployments in remote locations can be managed in real time, minimizing the need for site visits and reducing manual maintenance costs.

Feature Highlights:

- Worldwide 4G LTE Cat 1bis connectivity
- SDK for custom edge applications
- Rugged, small form factor design
- Clear LED indicators for status and errors
- Remote configuration, management, and updates with PercepXion™



Markets:



Vending and
Ticketing
Machines



Smart Building
Systems



Access Control
Systems



Digital Signs



Traffic Lights
Control



Surveillance
Cameras

LANTRONIX

Technical Specifications

DEVICE CATEGORY

- › LTE FDD Cat 1 bis 3GPP Rel 13 compliant
- › Downlink up to 10 Mbps
- › Uplink up to 5 Mbps

ANTENNA CONNECTORS

- › 1 x SMA antenna connector

INTERFACES

- › 1 x 100Base-T Ethernet RJ45 port
- › 1 x Recessed multifunctional reset button
 - › Reboot
 - › Reboot into recovery mode
 - › Reset to factory default settings

LED INDICATORS

- › 1 x Power
- › 1 x SIM
- › 1 x 4G
- › 3 x Signal strength
- › 1 x Custom indicators

SIM CARD SUPPORT

- › 1 x SIM card slot supports Mini USIM/SIM Format (2FF)
- › Optional soldered-down SIM (ETSI MFF2 DFN-8 USIM)

PROCESSOR AND STORAGE

- › 1 GHz ARM Cortex A8 processor with 256 MB RAM
- › 512 MB flash memory storage

CELLULAR

- › Profile managed packet data connections
- › Profile Routing
- › SIM Management
- › SIM Security
 - (PIN configuration, enable and disable)
- › Automatic and manual cellular band selection
- › Automatic and manual operator selection
- › Up to 6 APN configurations

NETWORK & ROUTING

- › Static Routing, Port Forwarding and DMZ
- › Dynamic DNS
- › VRRP for redundant router failover
- › DHCP Server, including address reservation by MAC address
- › Custom DNS server definitions
- › DHCP Relay

- › DHCP list display in Web-UI
- › Advanced DHCP Option configuration (Option 42 NTP, Option 66 TFTP, Option 150, Option 160)
- › Firewall to protect against DoS attacks

VPN

- › IPSec tunnel termination (for up to 5 tunnels)
- › GRE Tunnelling
- › OpenVPN (Client, Server and P2P)

ADMINISTRATION & CONFIGURATION

- › Percepixon™ for centralized cloud-based device monitoring, management, and data insights.
- › Secure web-based user interface (HTTPS) for complete device status and configuration
- › Password-protected configuration file backup and restore for quick device configuration and device cloning
- › SSH Command Line Interface for status monitoring, configuration and control
- › SNMP v1/v2/v3, including cellular-specific MIB, config and firmware download
- › LWM2M and TR-069 client for remote device configuration, configuration backup and restore, and firmware upgrade
- › Ping monitor watchdog (reset the connection on repeated ping failures)
- › Diagnostic Log Viewer (remote and local)
- › System Status and Security Logs
- › NTP Server Support for network time sync of the device's system clock
- › SMS over SGs support
- › Advanced Diagnostics and Control via SMS
 - › Query status information – such as Signal Strength, WAN IP, and Uptime.
 - › Configure the device remotely via SMS – such as APN and authentication settings.
 - › Execute commands via SMS – such as reboot and reset to defaults.
 - › Secure SMS management using sender whitelisting and password management
 - › SMS acknowledgement replies for queries and commands

FIRMWARE MANAGEMENT

- › Firmware Upgrade locally via LAN or remotely Over-The-Air (HTTPS, SNMP, TR-069, LWM2M)
- › Multiple firmware image storage on the device and dynamic install
- › Triggered firmware upgrade via SMS (initiate download & install from HTTPS)

SOFTWARE DEVELOPMENT KIT

- › Develop and install custom software applications
- › Open Linux standard development environment
- › Develop applications/scripting in standard ANSI C/Shell script and LUA
- › Package manager built into Web-UI for Application installation/removal
- › API (C, LUA and Shell libraries) to the unit's internal Runtime Database to allow complete status monitoring, configuration and control of the device from custom applications

TEMPERATURE

- › Operating Temperature Range: -30°C to +70°C
- › Storage Temperature Range: -40°C to +85°C
- › Operating Humidity Range: 0-95%

POWER SUPPLY

- › Power input via 2-way termination block receptacle
- › Field terminable power input via screw-type terminal block included
- › DC Power (8 – 40V DC)
- › Recommended DC supply via terminal block (12V 1.5A)

DIMENSIONS & MOUNTING

- › Device dimensions (excluding external antennas): 105 mm (L) x 88 mm (W) x 35 mm (H)
- › Device dimensions with Mounting Bracket (excluding external antennas): 111 mm (L) x 96 mm (W) x 40 mm (H)
- › Wall mount support in multiple orientations via mounting bracket
- › DIN Rail mount support via mounting bracket (Top hat section rail TH 35 IEC60715)

ENCLOSURE

- › IP40 rated

WARRANTY

- › 2 year limited warranty

Part Numbers

MODEL	NTC-201-01-01
Region	Worldwide
Certifications / Approvals	FCC, ISED CE, RCM PTCRB, AT&T, Verizon
Cellular Bands	B1, B2, B3, B4, B5, B7, B8, B12, B13, B18, B19, B20, B25, B26, B28, B34, B38, B39, B40, B41, B66
Optional Accessories	
Part Number	Description
Power Supply PSU-0250	12VDC 2.5A, 30W, Standard Temperature PSU, 2M Cable with 2 bare wires, with 4 Interchangeable Plugs (UK, US, EU, AU) without DC connector fitted (+/-2KV)
Antenna NANT-00001-000	Antenna, Single unit, LTE Tube Antenna