



5G INDUSTRIAL IOT ROUTER WITH WI-FI

NTC-550

PRODUCT SUMMARY

- › The **NTC-550** is a high-end high-speed industrial-grade 5G router. Designed with critical and complex applications in mind, it provides ultra-reliable, high bandwidth throughput even in extremely demanding environments.
- › Ideal for use in emergency vehicles, trucks, and buses, or as the core of complex systems to monitor and control critical infrastructure in remote, unmanned locations.
- › Support for the latest wireless technologies including Release 16 5G and Wi-Fi 6 to ensure access to the latest innovations and the best possible throughput at a world-leading price point.
- › An extensive array of software features is based on years of experience partnering with globally leading operators, system integrators and multinational enterprises.



TECHNICAL SPECIFICATIONS

CELLULAR BANDS (NTC-551)

FR1 Bands

- › n2, n5, n7, n12, n13, n14, n25, n26, n29, n30, n38, n41, n48, n66, n70, n71, n77, n78

LTE Bands

- › B2, B4, B5, B7, B12, B13, B14, B17, B25, B26, B29, B30, B38, B41, B42, B43, B46, B48, B66, B71

CELLULAR BANDS (NTC-552)

FR1 Bands

- › n1, n3, n5, n7, n8, n20, n28, n38, n40, n41, n75, n76, n77, n78

LTE Bands

- › B1, B3, B5, B7, B8, B20, B28, B32, B38, B40, B41, B42, B43

PEAK DATA SPEEDS*

5G SA Sub-6

- › 2.4 Gbps (DL) / 900 Mbps (UL)

5G NSA Sub-6

- › 2.5 Gbps (DL) / 550 Mbps (UL)

LTE

- › 1.6 Gbps (DL) / 200 Mbps (UL)

ANTENNA CONNECTORS

FAKRA connectors

- › 4 x Cellular ports for external cellular antennas
- › 1 x GPS antenna port for active external antenna
- › 2 x Wi-Fi 6 (2x2) antenna ports

INTERFACES

- › 1 x 2.5 Gbps LAN/WAN port
- › 4 x 1 Gbps LAN ports
- › 1 x USB-C port
- › 1 x Ignition sensing port
- › 3 x Configurable GPIOs
- › 1 x Configurable serial port (RS232/RS422/RS485)
- › 1 x microSD card slot

LED INDICATORS

- › 1 x Power
- › 1 x SIM
- › 1 x 4G
- › 1 x 5G
- › 3 x Signal strength
- › 1 x Wi-Fi
- › 1 x Bluetooth
- › 1 x GPS
- › 2 x Custom indicators

SIM CARD READER

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

GPS

- › GPS
- › GLONASS

CELLULAR

- › Profile managed packet data connections
- › Profile Routing
- › Data Profile IP Passthrough
- › SIM Security Management (PIN configuration, enable and disable)
- › Automatic and manual cellular band selection
- › Automatic and manual operator selection
- › Odometer reading available via Web-UI, CLI
- › SIM Switching
- › 5G and LTE Cell Lock

NETWORK AND 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 list display in Web-UI
- › Advanced DHCP Option configuration (Option 42 NTP, Option 66 TFTP)
- › Data Stream Manager providing ability to create mappings between input and output ports (e.g. Serial Port, SMS, USB) and perform required translation or data processing by each virtual tunnel
- › Modbus Server TCP/IP Gateway and Client TCP/IP Agent with up to 247 slaves connected to the Serial TCP/IP Gateway
- › Modbus RTU/ASCII frames support
- › VLAN Management
- › IPS Firewall to protect against DoS attacks
- › Network Service Assurance

VPN

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

ADMINISTRATION AND CONFIGURATION

- › Secure web-based user interface (HTTPS) for full 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 v3 including cellular specific MIB, config and firmware download
- › TR-069 and LWM2M for remote device configuration, configuration backup and restore, and firmware upgrade

- › SMS Client (Send/Receive) including inbox, outbox
- › Ping monitor watchdog (Reset connection on repeated ping failure)
- › Diagnostic Log Viewer (remote and local)
- › System Status and Security Logs
- › NTP Server Support for network time sync of device's system clock
- › Advanced Diagnostics and Control via SMS
- › Query status information via SMS – 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
- › Secure SMS management using sender whitelisting and password management
- › SMS acknowledgement replies for queries and commands
- › Module debugging (QXDM) over Ethernet
- › Site and location settings
- › Field test information for LTE and 5G

FIRMWARE MANAGEMENT

- › Firmware Upgrade locally via LAN or remotely Over-The-Air (HTTPS, SNMP, TR-069, LWM2M)
- › Triggered firmware upgrade via SMS (initiate download & install from HTTPS)

TEMPERATURES

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

POWER SUPPLY

- › Power input via 6-way termination block receptacle
- › Field terminable power input via screw type terminal block included
- › DC Power (8 - 40V DC)
- › 1 x Dedicated ignition input and 3 x I/O ports on 6-way connector
- › Power consumption, recommended DC supply via terminal block (12V 3A)

DIMENSIONS, WEIGHT AND MOUNTING

- › Device dimensions (excluding external antennas): 193.3mm (D) x 175mm (W) x 51.7mm (H) / 1.050 kg
- › Wall mount support in multiple orientations via embedded mounting holes
- › DIN Rail mount support via DIN Rail clips included in the box

*Theoretical only - actual values depend on network conditions

TECHNICAL SPECIFICATIONS

FEATURES AT A GLANCE

- › 5G with failover to 4G
- › Wi-Fi 6 and Bluetooth support
- › Multiple gigabits per second ports
- › Built-in GPS
- › Serial port, I/Os and Ignition sensing
- › Robust ruggedized industrial-grade metal housing
- › Wide operating temperature range
- › Designed, assembled and tested for unmanned locations in extreme environments



MODEL VARIANTS

MODEL	NTC-551	NTC-552
REGION / CARRIER	› North America	› Europe › Asia › Africa › Oceania › South America
REGULATORY CERTIFICATIONS	› FCC (USA) › IC (Canada) › PTCRB (USA and Canada) › UL – Planned	› CE (Europe) › RCM (Australia and New Zealand) › GCF (Europe) – Planned
CARRIER APPROVALS	› Bell – Planned › UScellular – Planned › AT&T – Planned › T-Mobile – Planned	› Telstra – Planned › Optus – Planned › TPG Telecom Australia – Planned › Orange – Planned › Vodafone – Planned › Telefonica – Planned › Deutsche Telekom – Planned › Spark – Planned › One NZ – Planned

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 Specifications are subject to change without notice. Images shown may vary slightly from the actual product.



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