

The logo for LANTRONIX, featuring the word "LANTRONIX" in a bold, sans-serif font. The letters "LANTRON" are white, and the letters "IX" are orange. A registered trademark symbol (®) is located to the upper right of the "X".

LANTRONIX®

NTC-550 Product Overview

May 2026

Industrial IoT Gateways, Modems, Routers

<https://www.lantronix.com/products-class/industrial-iot/>



Connect Critical Assets and Vehicles

- **Connect Any Serial Asset:** Any Vendor, Any Age, Anywhere
- **Lowest TCO:** Built-in Fieldbus Protocol Translation. Optimize cellular data cost and control unpredictable cloud costs
- **Edge Intelligent:** Improves Resiliency **No data is lost** if cellular backhaul goes down.

High-Speed Bandwidth for the Secured Data-Intensive Edge.

- **Absolute Reliability:** Self-healing connection recovery.
- **High-Speed:** Worldwide 5G/4G and Gigabit Ethernet.
- **Security Layer:** Configurable Firewall and VPN.

Edge-AI Gateways Asset & Process Insight to the Cloud.

- **Protocol Translation:** Supports diverse industrial standards.
- **Edge Processing:** Local data analysis and storage.
- **Universal I/O:** Ethernet, Wi-Fi, Cellular, and Bluetooth.

Rugged Serial Connectivity, Anywhere.

- **Serial Flexibility:** Full RS-232/422/485 support.
- **Extreme Durability:** Ruggedized for high vibration and temp.
- **Legacy Bridge:** Connects older serial devices to new networks.

NTC-550



Size: 193.3x175x51.7mm / Weight: 1050g

NTC-551-01-01	NTC-552-01-01
North America FCC/IC & PTCRB	ROW CE/RED, RCM
AT&T, Verizon*	Telstra



5G Rel'16 Industrial IoT Ethernet Router + Wi-Fi

MSRP \$599



Feature Highlights

- 5G NR 3GPP Release 16 eMBB & uRLLC
- 5G Sub 6 GHz SA / NSA with failover to 4G
- FAKRA antenna connectors for ease of connection.
- Private Network Support n48-CBRS, n77/n78 EMEA
- Advanced routing, firewall, and security protocols
- Robust, ruggedized, industrial-grade metal housing & Wide temp range
- Ideal for use in surveillance, building automation, industrial automation, and in-vehicle connectivity

Standard Interfaces

- 1x 2.5Gbps WAN/LAN Port
- 4x 1Gbps LAN ports
- Wi-Fi 6
- Serial (RS-232/422/485)
- GNSS
- 1 Ignition sensing
- 3 configurable IO's
- 1 USB 2.0 Type-C port
- microSD slot

Services

- SDK support
- SNMP v3, TR-069, TR-369, TR-181, LWM2M
- PercepXion support
- MQTT client (Azure & AWS)
- Cumulocity Support
- Diagnostics and Control via SMS
- Configuration Backup
- Firmware Management

Hardware

- 1x Optional soldered down SIM
- IP41 rated
- DIN rail mount included
- Temperature range: -30 to +70 °C

	NTC-551-01-01	NTC-552-01-01
5G NR Bands	n2, n5, n7, n12, n13, n14, n25, n26, n29, n30, n38, n41, n48-CBRS, n66, n71, n77, n78	n1, n3, n5, n7, n8, n20, n28, n38, n40, n41, n75, n76, n77, n78
4G LTE Bands	B2, B4, B5, B7, B12, B13, B14, B17, B25, B26, B29, B30, B38, B41, B42, B43, B46, B48-CBRS, B66, B71	B1, B3, B5, B7, B8, B20, B28, B32, B38, B40, B41, B42, B43

Industrial IoT Key Use Cases



Retail

Resilient Connectivity → Enhance Customer Experience

Lantronix 5G delivers fast, low-cost broadband for retail, overcoming infrastructure limits. Ensures always-on connectivity for inventory, transactions, and customer engagement—reducing downtime.



Energy & Industrial

Seamless Integration → Modernize Legacy Systems

Lantronix NTC-550 connects legacy Modbus to SCADA via cellular, eliminating infrastructure upgrades. Secure, rugged, and VPN-equipped, it enables remote management via PercepXion™—future-proofing industrial operations.



Smart Cities & Transportation

Reliable Field Connectivity → Reducing operational delays

Lantronix NTC-550 vehicle-mounted routers provide a secure, high-speed Wi-Fi hotspot for handheld and field team devices, ensuring stable connectivity and cutting operational delays.

Smart Cities & Transportation

In-Vehicular Connectivity

› Challenge

Technical personnel working near their utility service vehicles require reliable Wi-Fi connectivity for tablets, laptops, and handheld devices to perform daily operational tasks. This connectivity must be secure, stable, and capable of supporting critical applications in the field.

› Solution

Lantronix vehicle-mounted NTC-550 delivers a robust connectivity solution by creating a secure Wi-Fi hotspot around the service vehicle. It incorporates advanced VPN, firewall, and encryption technologies to ensure data security. Additionally, the router is integrated with PercepXion™, enabling centralized fleet monitoring, configuration, and real-time updates for seamless field operations.

Why Customers Choose Lantronix

- › Fast installation: No extra power protection needed, just connect to the battery
- › eMark
- › Low TCO

5G



High-speed

WiFi

Wi-Fi 6



Low Power



NTC-550



Smart Cities & Transportation

Airport Private Networks

› Challenge

Airport vehicles must remain connected to the airport's private network while operating on-site. When these vehicles leave the airport premises and move out of coverage, their connectivity should automatically switch to a public carrier network. Upon returning to the airport, the connection should seamlessly revert to the private network.

› Solution

The NTC-550 provides a vehicle-based connectivity solution. The NTC-550 offers the latest VPN, firewall, and encrypted connection technology. Failover to internal SIM is also supported.

› Why Customers Choose Lantronix

- › Private 5G Ready - Supporting Global Public Operators & Private Networks
- › High-Speed Low-Latency Connectivity for Critical Assets
- › Ruggedized for Demanding Environments

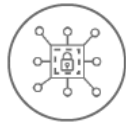
5G



High-speed



VPN



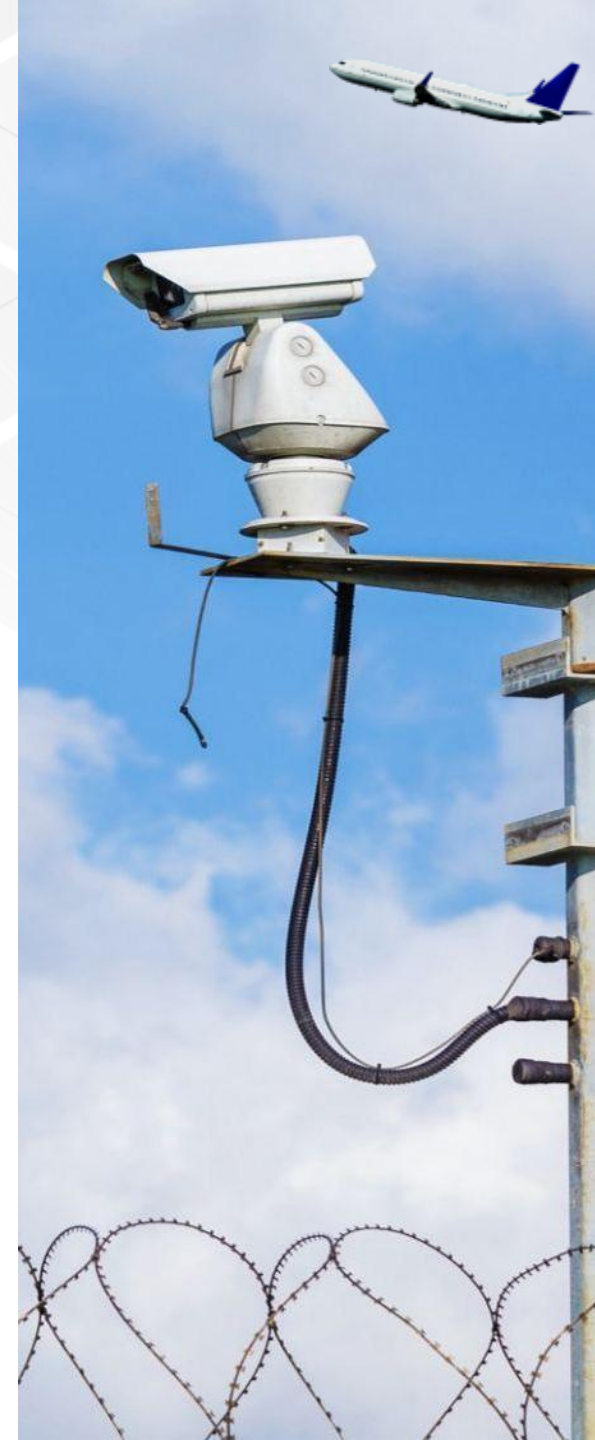
Private Network



NTC-500



NTC-550



Retail & Remote Site Connectivity

Broadband 5G Wireless Connectivity

› Challenge

Older retail or redeveloped buildings for retail or remote and distributed retail sites experienced delays in connectivity due to permitting details and a lack of supporting infrastructure.

› Solution

NTC-500 and 550 Series deliver fixed wireless access where wired networks are impractical and expensive. Ideal for remote sites, critical infrastructure, and mobile assets. Enabling fast deployment, lower costs, and resilient communications

› Why Customers Choose Lantronix

- › Ease of Setup & Low TCO
- › High-Speed Low-Latency Wireless Performance
- › Scalable and Future-proof



High-speed



Low TCO



NTC-500



NTC-550



Security & Surveillance

Remote and Distributed Sites

> Challenge

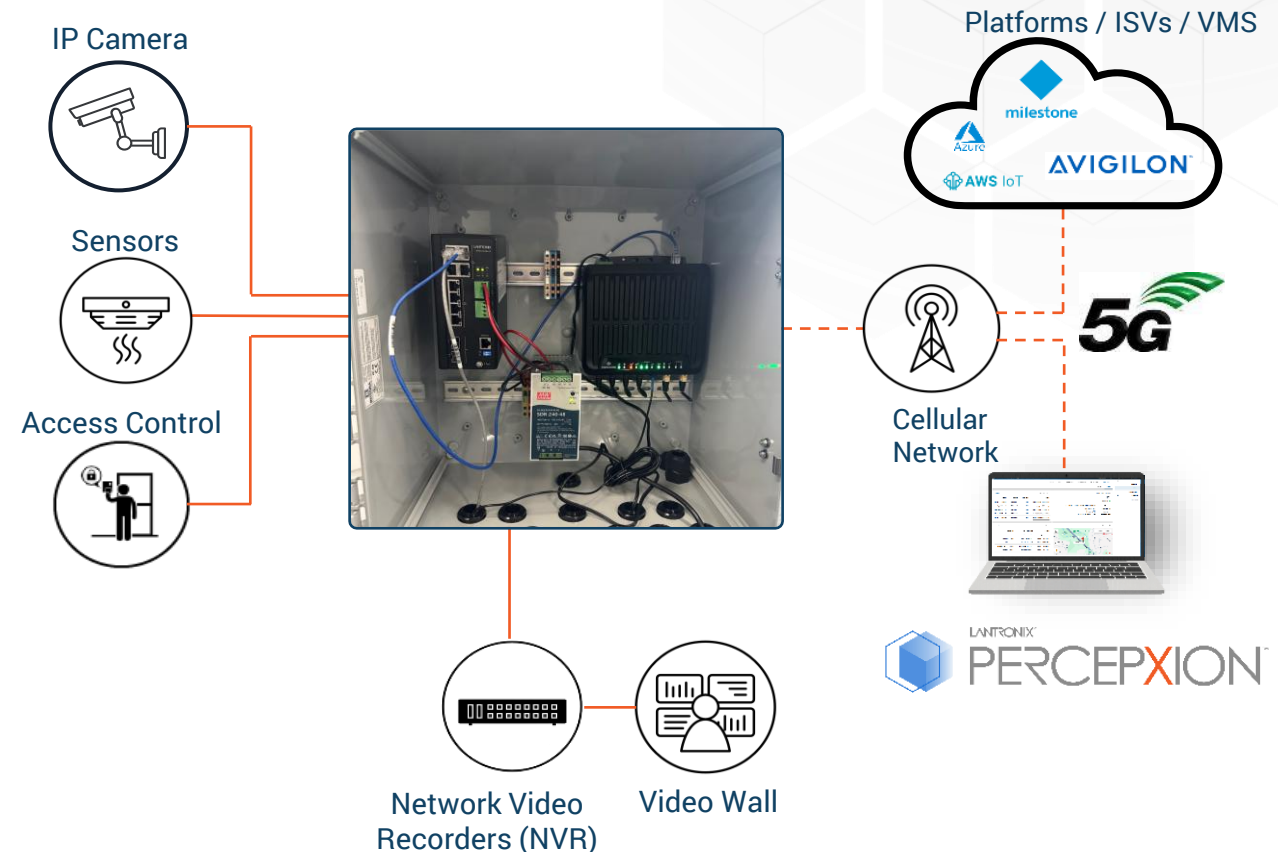
Security and surveillance systems are often deployed in locations where fixed connectivity is unavailable or prohibitively expensive. Running fibre or trenching cable to remote poles, car parks, perimeters, or temporary sites can cost tens of thousands of dollars per location and take weeks or months to complete.

> Solution

The NTC-550 provides a high-bandwidth 5G/4G connection that eliminates the need for costly fibre runs. It delivers reliable uplink for IP cameras, supports PoE++ switch integration, and enables secure backhaul to the VMS.

> Why Lantronix

- > Lantronix provides both the PoE++ and the 5G connectivity gateway as unified solution.
- > This integrated approach reduces system complexity and deployment time, eliminates the need to source and validate multiple vendor.



Market Segments

Retail/QSR



Transportation



Private Networks



Digital Signage



Smart Cities



Logistics



Industrial



Agribusiness



Construction



Building



Security



Energy



NTC-550 Interfaces



Interface Description:

1. 2.5 Gbps WAN/LAN Ethernet port
2. 1 Gbps LAN Ethernet ports
3. Serial Port
4. Reset Button
5. Bluetooth Button
6. Six-way terminal block connector
 - Power (8 to 40VDC)
 - 1x Ignition Sensing
 - 3x AUX IO
7. FAKRA Cellular (Violet)
8. FAKRA GNSS (Blue)
9. FAKRA Wi-Fi (Beige)
10. External SIM (2FF)
11. External SIM eject button

NTC-550 Interfaces



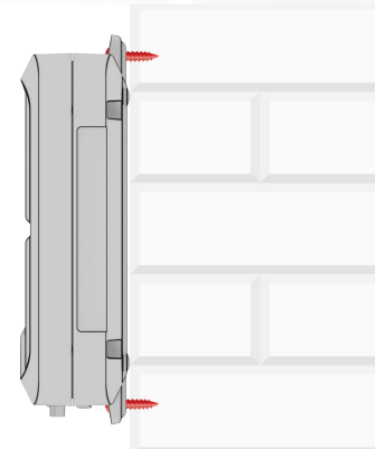
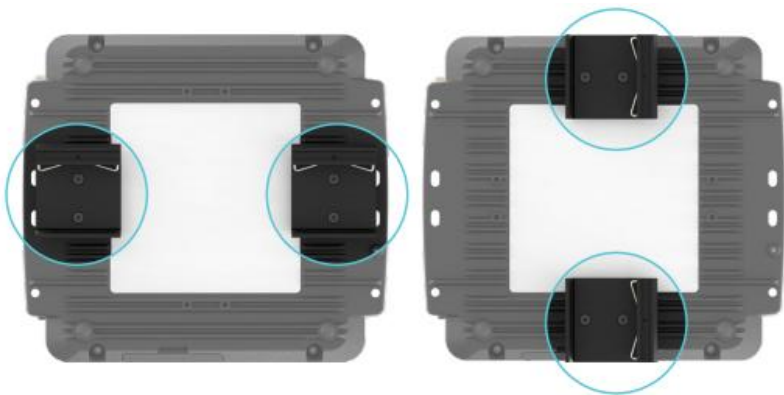
Interface Description:

- 12. SD Card Slot
- 13. USB-C port

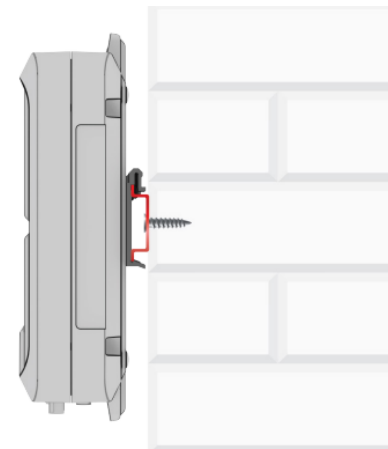
*Interfaces behind cover
accessible via screwdriver*

DIN Rail Mounting Kit

The DIN rail mounting kit allows the device to be installed in two orientations. Install the DIN rail mounting kit by screwing the DIN rail mounts into the following locations



Mount directly using the available mounting holes on the device body



Use the DIN rail mounting kit to mount the device.

What's in the Box

NTC-550 Series

5G Release 16 Sub 6 IIOT Router (NTC-550)



1m CAT6 Ethernet cable



Box Insert



Set of DIN mounting brackets



Six-way terminal block



Available accessories (not included):

- Standard PSU (6 interchangeable plugs) (PSU-0250)
- 7-in-1 Antenna Kit - 4 Cellular (ANT-0101-B07)
- 7-in-1 Combo Antenna (ANT-0102-000)

Optional Accessories



ANT-0102
7-in-1 Combo Antenna

5G/LTE MIMO, Wi-Fi MIMO, GNSS, SMA male, comes with a 3m extension cable FAKRA to SMA female



ANT-0101-B07
7-in-1 Antenna Kit

Bundle, 4pcs 5G, 1pc GNSS, 2pcs Wi-Fi, FAKRA connectors, designed for NTC-550 evaluation

PSU-0250
POWER SUPPLY

WALL CUBE, 12VDC 2.5A, 30W, 2M CABLE WITH 2 BARE WIRES, UNIVERSAL AC PLUG EU/UK/US/SAA, +/-2KV



The Perception™ IoT Edge Solutions Platform

Accelerate your time to market.

Centralized Device Management

Cloud-powered single pane of glass for anytime, anywhere secure access to your globally installed Lantronix devices.

Remote Device Monitoring

Bandwidth-optimized real-time monitoring with rules-based alerts and notifications.

Application Integration

End-to-end IoT application download, provisioning and update to the edge.

Data Analytics

Device telemetry data is captured for real-time and historical trend and anomaly analysis



We Built It,
So You Don't Have To.



Securely deploy and manage device applications at scale

PercepXion Remote Device Management

Device Label



Scan the QR code on the device label to register your device on PercepXion for remote device management.

Property	Value
Device Name	NTC_552-OB52
Status	Connected
Device ID	00204
Serial Number	A4A1
IP Address	192.168.10
Last Contacted	May 10, 2026 10:42:11 AM

PercepXion Dashboard

Remote Device Console

```
To terminate this session close the browser tab.  
  
ntc-552 login: root  
Password:  
Last login: Mon May 11 12:55:36 +1000 2026 on /dev/pts/0.  
root@ntc-552:~# environment  
ID_mac=A4:AE  
ID_sn=219743
```

Remote Device WebUI

Category	Item	Value
SYSTEM INFORMATION	Device name	5G Industrial IoT Router
	Serial number	2197
	Model	NTC-552-01
	Hardware version	RG520NEU
2.5GE LAN/WAN	Interface assignment	WAN
	IP	192.168.10 255.255.255.0
	MAC address	A4:AE:9A
CELLULAR CONNECTION STATUS	Cellular module	Model: RG520N-EU Module firmware: RG520NEU
	Uptime	04:27:21
	Device firmware	3.3.1

Thank You!



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LANTRONIX

Global Industrial IoT Leader based in Irvine, CA