Nexus T8 Series

Advanced IoT End Device for HVAC and Complex I/O Control

The Nexus T8 is an advanced IoT end device built for controlling and monitoring field equipment—packaged HVAC rooftop units, lighting, ventilation, and multi-point sensor monitoring—through NexRev's Freedom cloud platform. With 8 universal inputs, 6 Triac outputs, and 2 universal outputs, the T8 delivers comprehensive signal-level control. Secure LTE cellular, QR code commissioning, and magnetic mounting enable installation in minutes.



30+	1M+	50–90%	24/7
YEARS EXPERTISE	CONNECTED DEVICES	FASTER INSTALL	AUTONOMOUS OPERATION

KEY FEATURES

- Multi-carrier LTE Cat M1 / NB-IoT cellular
- QR code commissioning via mobile app
- BLE 5.0 with support for up to 8 wireless sensors
- BLE mesh for inter-device data relaying
- 8 universal inputs (0-10V, 4-20mA, resistive, dry contact)
- 6 Triac outputs for 24VAC load switching
- 2 universal outputs (0-10V or 0-12VDC)
- Remote OTA configuration and firmware updates
- Magnetic and bracket-based mounting
- Edge-based autonomous operation
- Secure LTE — isolated from customer IT networks
- Hardware Triac power source selector (internal/external)

COMPATIBLE APPLICATIONS

Application	Description
Packaged HVAC	Gas/electric, heat pump Type O and B
Lighting Control	ON/OFF switching
Ventilation	Exhaust fans, air curtains, hoods
Refrigeration	Walk-in cooler/freezer monitoring
Unit Heaters	Temperature-based on/off control
General I/O	Sensor and relay applications

TECHNICAL SPECIFICATIONS

Power Supply

Parameter	Value
Voltage Range	24VAC/DC; ±15%; Class 2
Frequency	50/60 Hz
Power Consumption	17VA max

Radios

Radio	Specification
Bluetooth	Industrial BLE 5.0
Cellular	LTE Cat M1 / NB-IoT

Environmental

Parameter	Value
Operating Temp	-40°F to 140°F (-40°C to 60°C)
Storage Temp	-40°F to 185°F (-40°C to 85°C)
Humidity	5% to 95% non-condensing

Standards & Certifications

Standard	Compliance
FCC	Part 15 compliant
PTCRB	Certified
ISED	Listed

Hardware

Component	Specification
Processor	ARM Cortex-M33 @ 64 MHz
RTC	Built-in with battery backup
Wire Connectors	5mm pitch terminal blocks

Universal Inputs

Parameter	Value
Input Type	Universal; software configurable
Resolution	16-bit ADC
Modes	0-10VDC, 4-20mA, resistive, dry contact
Power Supply Out	24VDC; 140mA max

Universal Outputs

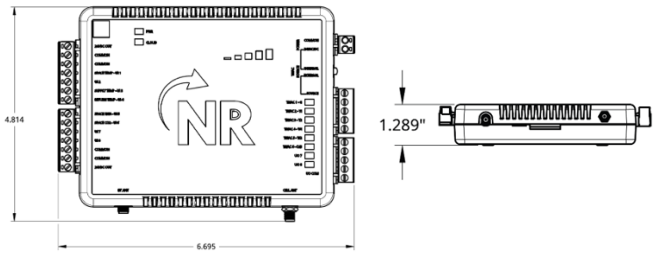
Parameter	Value
Output Type	Universal; software configurable
Resolution	10-bit DAC
Modes	0-10VDC analog or 0-12VDC digital
Protection	Built-in back-EMF snubbing diode

Triac Outputs

Parameter	Value
Output Type	24VAC Triac
Max Current	0.5A continuous; 1A @ 15% duty (10 min)
Power Source	Internal or external (dipswitch selectable)
Quantity	6 Triac outputs

Dimensions

6.695” × 4.814” × 1.289” (W × H × D)



CYBERSECURITY BY DESIGN

Encrypted LTE cellular isolates building controls from customer IT networks. **No Wi-Fi. No LAN dependency. Zero network attack surface.**

All communications secured with TLS 1.3 encryption and X.509 certificate-based device authentication. Each device operates on a dedicated cellular connection managed by NexRev, keeping customer networks completely untouched.

ORDERING & SUPPORT

For ordering information, product availability, or technical support:

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