

Nexus Omni Datasheet



The NoTraffic™ Nexus is installed in the cabinet and receives detection data from the Sensors and places calls to the traffic controller. The Nexus connects to the cloud-based Mobility OS and runs applications for improved traffic safety and performance.

Content

Included Components	1x Nexus Omni 1x Power supply 1x RJ25 cable 1x Smart Harness (SDLC) 1x Adapter (SDLC)
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Input/Output

Front	4 x RJ25 Smart Harness / Controller serial port 8 x RJ45 Ethernet / IP 1 x USB 3.0
Rear	2 x RJ25 Sensor Power Unit serial port 2 x SIM card 9 x Antenna Connectors

Power

External Power Supply	Input: 110–230 V AC, 50/60 Hz Output: 12 V DC, 60 W
Input Power	12 V DC, 5 A maximum
Power Consumption	25 W average, 26 W maximum (at room temperature)

Wireless Connectivity

Cellular	Multi-band 4G LTE and 3G networks including DC-HSPA+, HSPA+, HSPA, and UMTS (WCDMA).
Wi-Fi	Wi-Fi 5 (802.11a/n/ac) 5 GHz Wi-Fi 5 (802.11b/g/n/ac) 2.4 GHz
Location Service	Multi-constellation GNSS (GPS, GLONASS, Galileo, BeiDou)

Security

Certifications	SOC 2 Type II ISO/IEC 27001
Hardware Hardening	Segmented network creates an air gap between restricted components and the cloud. Detection and local applications remain operational during cloud outages. Controller-defined boundaries strictly govern all operations.
Data Privacy	No sensitive or Personally Identifiable Information (PII)
Encryption	Data in transit secured with Transport Layer Security (TLS) 1.2+ and VPN per intersection. Data at rest secured with 256-bit Advanced Encryption Standard (AES-256).

Environmental & Reliability

Operating temperature	-30 F to 165 F (-34 C to 74 C)
Humidity	Up to 95% RH (non-condensing)
Ingress protection	IP42 per IEC-60529
MIL-STD-810H	Salt Fog, Vibration and Shock
Warranty	5 years extendable to 10 years

Certifications & Regulation

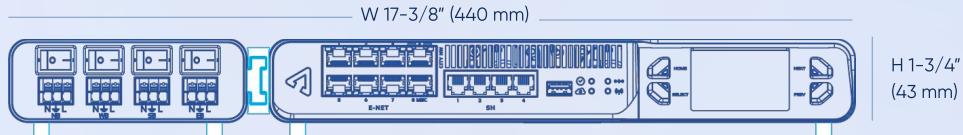
FCC Part 15 PTCRB NEMA TS 2 TUV

Dimensions

Size	Width 12 in (305 mm) Depth 8-1/2 in (215 mm) Height 1-3/4 in (43 mm)
Weight	4.2 lb (1.9 kg)

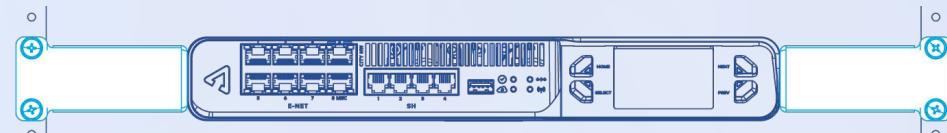
Shelf mount

Nexus with SPU



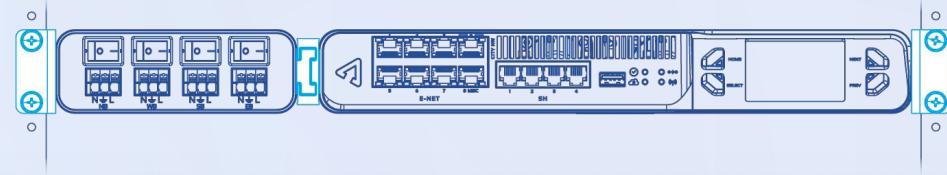
Rack mount

Nexus standalone



Rack mount

Nexus with SPU



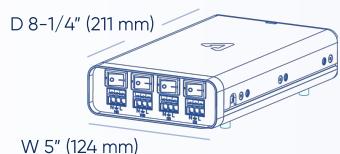
Optional Accessories

- C1 Smart Harness
- A/B/C Smart Harness
- 15 to 25 pin SDLC cable
- Shelf/Rack mounting options (see diagram)
- Sensor Power Unit

Sensor Power Unit (Optional)

Supplies power and provides overcurrent protection for up to 4 Sensors from the cabinet.

Weight:
1.5 lb (0.7 kg)



Vertical shelf mount

Nexus standalone

