VXI-300
LTE-A Router Intelligent Antenna Hybrid
Operational Description
Ventus Technologies
10 Norden Place, Norwalk CT 06855
DOC#: 1002-VXI-1 Rev.A

The VXI-300 is an Enterprise Class dual band 2.4Ghz/5Ghz WiFi router with Cellular Network connections. It provides for 1 LAN and 1 WAN 10/100/1000 Ethernet port with 802.3af/at PoE PD for remote powering.

FEATURES:

1x Wireless Cellular Module
- Various carriers and fallback available
- Supports LTE Advanced
- 2x Micro SIM (3FF) 15 x 12 mm
- M.2 Mini Card form factor

2x 10/100/1000 Ethernet ports configurable as LAN or WAN ports
- IEEE 802.3 10/100/1000 Mbps
- 1 PoE PD WAN port 802.3af
- 1 LAN port
- Auto MDI/MDIX
- VLAN 802.1Q
- DHCP server
- DMZ
- MAC address filtering
- Link and Speed LEDs

FEATURES - continued:

2x Wi-Fi, mPCIe
- IEEE 802.11a/b/g/n/ac
- Concurrent Dual band 2.4/5GHz
- 3x3 MIMO, 1750Mbps
- Guest SSID support
- Dynamic Frequency Selection (DFS) in 5GHz
- 802.11ac MCS 8 - 256-QAM modulation
- 40 MHz double-wide channels in 2.4GHz (Bonded)
- 80/160 MHz channels in 5GHz range
- Short guard interval (GI) in 20/40/80 MHz channels
- IEEE802.11d - additional geographic regulatory domains
- WPA-Personal/WPA-Enterprise 152bit WEP/WPA-PSK/WPA2-PSK
- WIPS (Wireless Intrusion Prevention)
- MAC Filtering
- Support for Mesh networks, Guest WiFi

CPU/Memory:
- NXP LS1024A Dual core 1.2Ghz QorIQ Communication Processor
- Linux based OpenWRT operating system
- 256MB DDR3 SDRAM 800Mhz
- 256MB Parallel NAND Flash
- 16MB Serial SPI NOR Flash
- 64KB Serial EEPROM

Security/Encryption:
- Powerful Deep Packet Inspection Engine
- GZIP Decompression Capability
- Dedicated IPsec Data Encryption Engine
- Configurable Ethernet DMZ

Antennas:

Wi-Fi
- Internal 3x3 2.4/5Ghz Wi-Fi antenna array

Cellular
- Internal multi-band 2x2 MIMO antenna

FEATURES - continued:

      Accelerometer
          • Internal 3-axis

      Power-over-Ethernet
          • Single Port PD power manager
          • Compliant to IEEE 802.3af standard

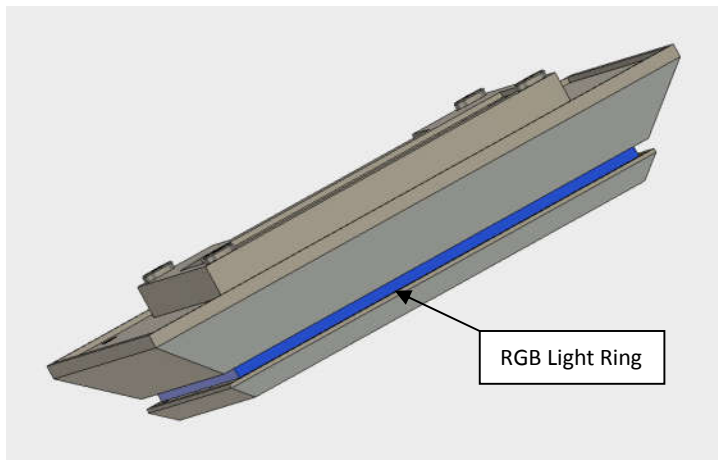   **Input Power options:**

          PoE, WAN Port
               • 48 VDC, PoE 802.3af

          Local, Barrel Jack
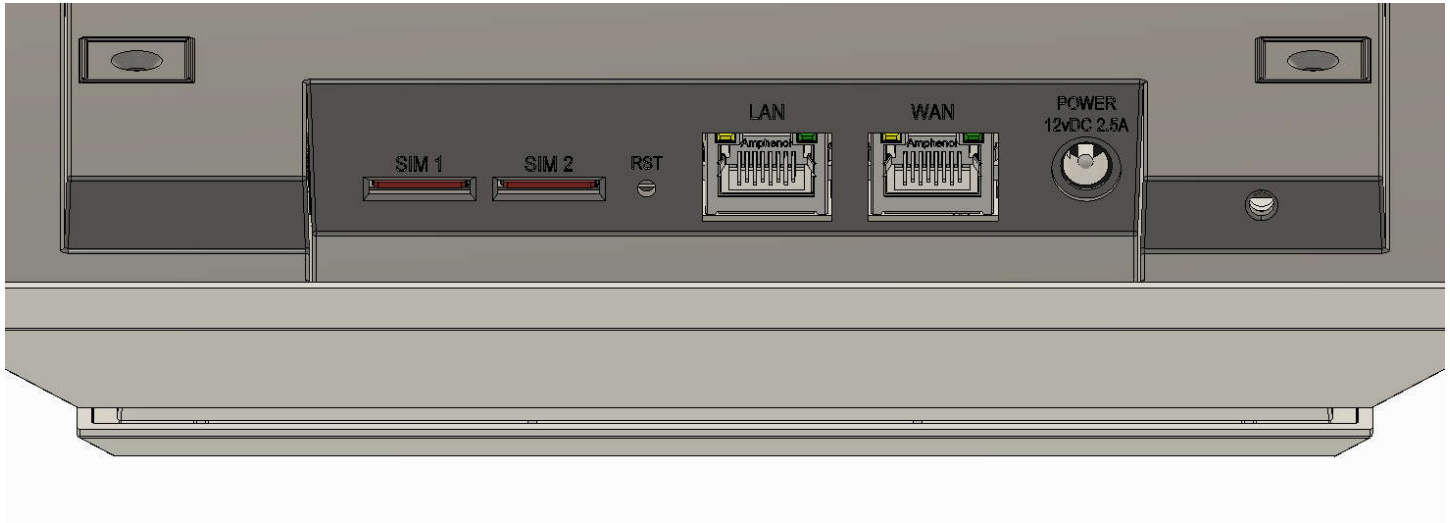   • 12 VDC, 30W External Power Supply, Efficiency Level VI standard

Indicators:

  • Multifunction RGB light ring
      • BLUE, WiFi and WAN connected
      • ORANGE, Limited Network Connection
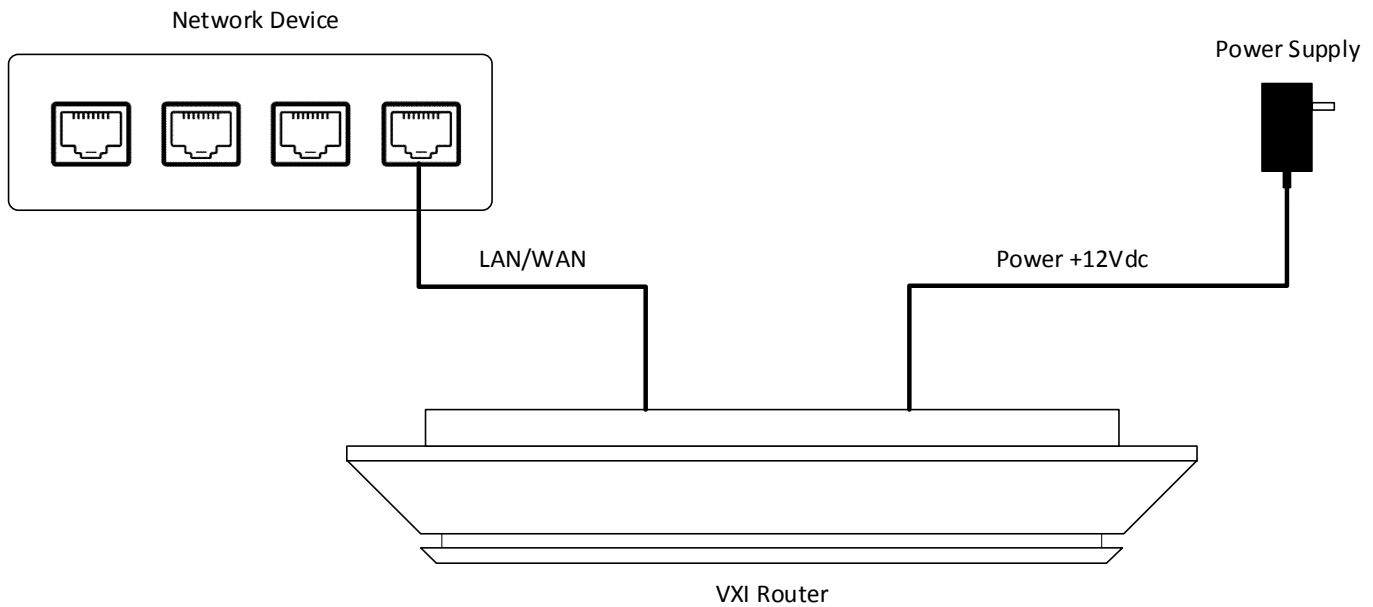   • RED, System Fault

RGB Light Ring

External Connections:

- 2 x Micro SIM Slots
- 1 x LAN , 10/100/1000 Ethernet Port
- 1 x WAN, 10/100/1000 Ethernet & PoE Port
- 1 x Power Input Connector Barrel Type 12V DC
- Reset Push button (recessed from panel)

Typical Installation:

Network Device

Power Supply

LAN/WAN

Power +12Vdc

VXI Router

Enclosure:
- Plastic (UL-V0 : material ABS+PC), Color = White
- Embossed logo
- Dimensions: 8.27W x 8.27D x 1.70H" (210W x 210D x 43H mm)
- Weight: 27.68 oz (0.785kg)

Environmental Specification:
- Working Temperature: -20 to 45°C
- Storage Temperature: -40 to 70°C
- Humidly: 5% to 85% Non-condensing

FCC Statement:

- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of
the following measures:
-Reorient or relocate the receiving antenna.
-Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help.

To assure continued compliance, any changes or modifications not expressly approved by the party. Responsible for compliance could void the user's authority to operate this equipment. (Example- use only shielded interface cables when connecting to computer or peripheral devices).
This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Radiation Exposure Statement:
The equipment complies with FCC Radiation exposure limits set forth for uncontrolled enviroment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

Wi-Fi 5G indoor use only Operations in the 5.15-5.25GHz Band

This device contains LTE transmitter module FCC ID: N7NEM75