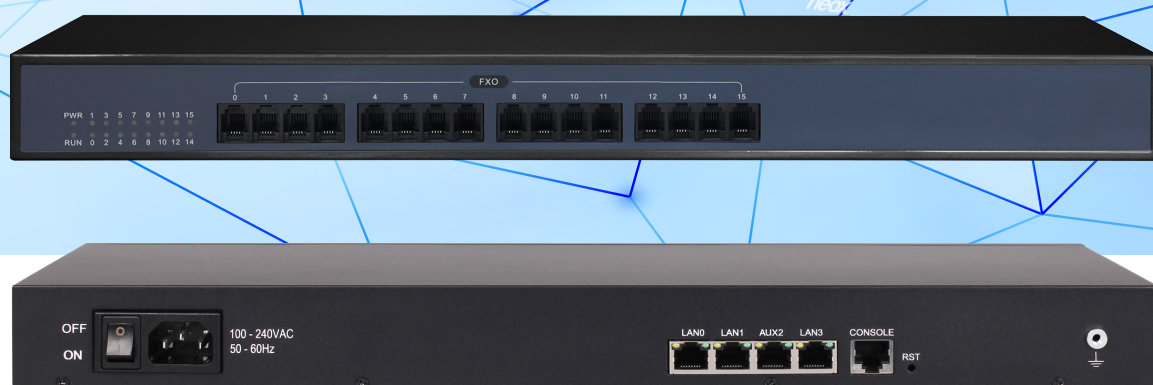# STL neox

Making every conversation count

NXO2000-16O Analog VoIP Gateway

The **NXO2000-16O** is a highly versatile and robust analog gateway engineered to deliver **seamless and efficient** integration between modern **IP-based telephony networks** and traditional telephone systems (POTS) or legacy PBX infrastructures. Featuring **16 FXO ports**, it is an **optimal solution** for small to medium-sized businesses, dynamic call centers, and multi-site environments looking to enhance their communication systems with **cost-effective and high-performance** VoIP services.

The **NXO2000-16O** is fully compliant with the **standard SIP protocol**, ensuring **smooth interoperability** with leading **IMS/NGN platforms** and advanced SIP-based IP telephony solutions. Its **reliability, scalability, and ease of deployment** make it the **perfect choice** for organizations aiming to streamline operations, reduce costs, and achieve superior voice connectivity across locations.

Key Features

- **Seamless Integration**: Ensures full compatibility with SIP-based IP telephony systems and leading IMS/NGN platforms.
- **Affordable Connectivity**: Offers 16 FXO ports for cost-effective and dependable analog-to-IP communication.
- **IP Support**: Operates seamlessly on both IPv4 and IPv6 networks for future-ready deployments.
- **Enhanced Voice Quality**: Supports multiple codecs, including G.711A/U, G.723.1, and G.729A/B, for crystal-clear audio transmission.
- **Reliable Fax Transmission**: Provides Fax over IP capabilities with T.38 and Pass-Through support.
- **Efficient Network Management**: Features TR-069 and SNMP protocols for streamlined remote monitoring and control

Environmental and Hardware

Power Supply: 100-240VAC, 50-60 Hz

Power Consumption: 30W

Temperature Range:

  Operating: 0°C to 45°C

  Storage: -20°C to 80°C

Humidity: 10%-90% (Non-Condensing)

Dimensions: 440 x 230 x 44 mm (3U)

Weight: 2.7 kg

Management and Maintenance

Management Protocols:

SNMP, TR-069

Auto Provisioning and Cloud-Based Management

Configuration and Diagnostics:

Web/Telnet Access

Firmware Upgrades via Web Interface

Configuration Backup/Restore

Call Detail Records (CDR) and Syslog Support

Tools: Ping, Traceroute, Network Capture

IVR-Based Local Maintenance

Outward Testing (GR909)

Time Management: NTP and Daylight Saving Time

Voice and Codec Capabilities

Supported Codecs: G.711 A/U, G.723.1, G.729A/B

Voice Optimization Features: Silence Suppression, Voice Activity Detection (VAD)

Comfort Noise Generation (CNG)

G.168 Echo Cancellation (128ms Adaptive Buffer)

Dynamic Jitter Buffer

Additional Functionalities: T.38 Fax Support / Pass-through

Programmable Gain Control

Modem/POS Support

DTMF Modes: Signal, RFC2833, Inband

VLAN 802.1P/802.1Q

Layer3 QoS and DiffServ

FXS and FXO Features

FXO Interface:

Connector: RJ11

Dial Modes: DTMF/Pulse

Caller ID Formats: FSK and DTMF

Polarity Reversal, Answer Delay,
Busy Tone Detection, and
No Current Detection

Capacity and Interfaces

Port Capacity: Configurable from 16 FXO ports,
RJ 11 ports

User Board Design:

Console: 1 x RS232 (115200 bps)

NXO2000-16O: 3 LAN Ethernet Ports
(10/100Mbps, RJ45)

VoIP and Network Features

VoIP Protocols: SIP v2.0 (UDP/TCP), RFC 3261

RTP/RTCP (RFC 2198, 1889)

SDP, TLS/SRTP Encryption

NAT Traversal: STUN,

Static/Dynamic NAT

RFC Compliance:

2833, 3262/63/64/65, 3311, 3515, 2976

IPv6 in SDP (RFC 3266), TEL URI (RFC 2806)

SIP Trunking

Early Media and Early Answer

Session Timer in (RFC 4028), NAT report (RFC 3581)

Outbound Proxy Support

Supports DNS SRV, A Query, and NATPR Query

Network Optimization:

Supports Static IP, Dynamic IP, and PPPoE

DHCP Client Support: Compatible with both IPv4
and IPv6 networks

Comprehensive Protocol Support:

• Includes TCP, UDP, TFTP, FTP, ARP, RARP, Ping,
  NTP, SNTP, HTTP/HTTPS, and DNS

• Provides Ping and Tracert tools

• Supports advanced DHCP features, including
  Option 66, 120, and 121

• Integrates OpenVPN

Advanced Software and Call Management Features

Access Control & Security:

Web ACL and Telnet ACL ensure secure system management and controlled access.

Routing and Call Management:

Prefix-based **Routing Rules** for intelligent call direction.

Flexible Caller/Called Number Manipulation **for customized call handling.**

Digit Mapping for efficient number translation and call routing.

Bandwidth Optimization: Advanced algorithms to optimize bandwidth usage for improved performance.

Supplementary Call Services: Speed Dial, Port Group

Action URL Integration: Automated system triggers and external integrations to streamline operations.

Why STL-Neox?

Trusted Globally: CCaaS/UCaaS solution with 500+ customers worldwid

Certified Excellence: Make in India, Gartner-reviewed, ISO 27001/14001, CMMi Level 5, DOT-TRAI tested

All-in-One Platform: Unifies all communication needs on a single platform

Open SIP Protocol: Avoids vendor lock-in

In-House Development & Customization: Tailored to meet specific client needs

24x7 Professional Support: Strong post-sales service for seamless operations

Value for Govt. Helplines, Telcos, Data Centers, and Enterprises

Multi-Vendor Compatibility: Interoperable with various systems

Compliance-Ready: Meets data privacy and security standards

About Sterlite Technologies Ltd. (STL)

STL is a leading global optical and digital solutions company providing advanced offerings to build 5G, Rural, FTTx, Enterprise, and Data Centre networks. The company, driven by its purpose of 'Transforming Billions of Lives by Connecting the World', designs and manufactures in 4 continents with customers in more than 100 countries. Telecom operators, cloud companies, citizen networks, and large enterprises recognize and rely on STL for advanced capabilities in Optical Connectivity, Global Services, and Digital and Technology solutions to build ubiquitous and future-ready digital networks. STL's business goals are driven by customer-centricity, R&D and sustainability. Championing sustainable manufacturing, the company has committed to achieving Net Zero emissions by 2030.