nereus

Prodys

Multiple IP, ISDN and X21 Audio Codec.

Nereus: up to 14 st/28 mono IP audio codecs in a 3U chassis.

Nereus One: up to 4 st/8 mono IP audio codecs in a 1U chassis.

Nereus front view

Nereus is an IP/ISDN/X21 Multicodec which can house up to **14 IP audio modules** or up to 7 couples of IP + ISDN/X21 modules.
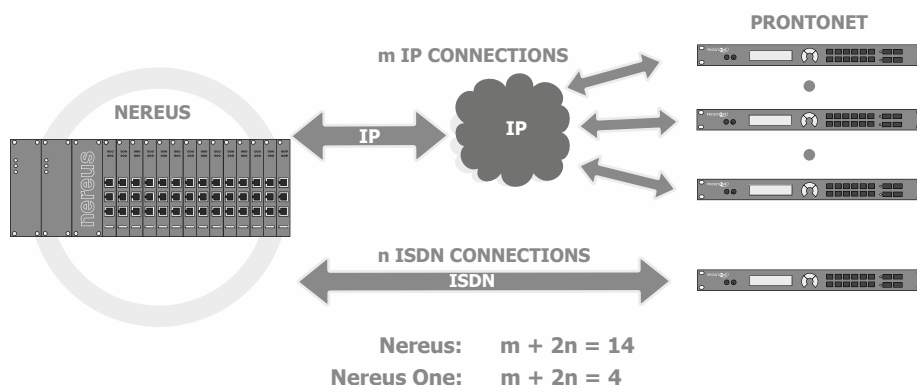
Nereus One is the smaller version and can house up to **4 IP audio modules** or up to 2 couples of IP + ISDN/X21 modules.

These audio modules offer the possibility of extending the number of audio signals provided by a single ProntoNet codec, inheriting all its key features such us its widest range of audio compression modes, stability, flexibility and easiness to use.

The Nereus units support **individual remote control** of each audio module via embedded web server or centralized management via ProdysControl application.

Operation Features

✔ **Configurable and scalable system** : Up to 14 IP modules (up to 4 for Nereus One) or any combination of IP with ISDN/X21 modules. Cards can be hot swapped for servicing.
✔ **SolidStream by Prodys** enables streaming of STL-grade audio quality over inexpensive links.
✔ Each module can be **controlled remotely** from its Web Page or from ProdysControl.
✔ **Automatic detection** of the encoding mode used by the remote unit.
✔ **Independent encoding/decoding** operation.
✔ **Additional LAN Management port** to split audio and control data flows or for SolidStream.
✔ Call facilities: **Auto-redial**, call **scheduler** and **log systems**.
✔ **User Access Control** to define different access restrictions in a per user basis.
✔ **Configuration presets** to define different configurations for all or some specific parameters.
✔ **N+k Prodys Redundancy Protocol** allows K backup IP codecs to provide resiliency for up to N active IP codecs.
✔ **Up to 4 user configurable general purpose input-outputs (GPIO)**. Inputs can be set up to control audio inputs or reset alarms, and outputs can be configured to monitor different parameters.
✔ **Alarms**: Real Time alarms management through **SNMP traps, GPO and e-mails**
✔ AC or DC power supply with an **option for AC or DC redundant power supply.**

PRONTONET

m IP CONNECTIONS

NEREUS

IP   IP

n ISDN CONNECTIONS
ISDN

Nereus: m + 2n = 14
Nereus One: m + 2n = 4

nereus

Nereus One front view

Audio Features

✔ Analog and Digital Stereo Audio in a single module

✔ **Analog Audio**
- 24 bits A/D and D/A converters.
- 15 way D type connector electronically balanced.

✔ **Digital Audio**
- AES/EBU. Up to 24 bits. Automatic rate adaptation.
- Transparent mode over IP to send data instead of audio, such as Dolby E
- 9 way D type connector
- External clock input.

✔ **Audio Compression Algorithms**
- OPUS
- MPEG 1,2 Layer II
- Enhanced and Standard apt-X™
- G722 and G711 A/µ Law
- MPEG AAC LC, LD, HE & ELD
- PCM (16,20 & 24 bits)

Communications Features: IP,ISDN and X.21

✔ **Dual operation over IP and ISDN**: Program and Talkback lines.
✔ **IP**
- 10/100BaseTx Ethernet port, RJ45 connector.
- Fully **TCP/UDP/IP** connectivity.
- **IP Multicast**, **Unicast** and **Multi-Unicast** audio streaming transmission/reception.
- **IP Compatibility**: SIP/SAP/SDP/RTP/STUN according to N/ACIP EBU Tech 3326.
- Prodys **NAT Traversal** Streaming Protocol permits router firewall pass-through.
- **FEC** (Forward Error Correction) **and Error Concealment** to deal with packet losses.
- **SolidStream by Prodys** for streaming of STL-grade audio quality over inexpensive IP links.
- Prodys **Real time Network Analyzer** to monitor critical network parameters in real time.
- **Automatic Jitter buffer** to avoid audio dropouts, compensating for up to 10 seconds of jitter in the IP connection.
✔ **ISDN** (optional) terminal adaptor available with S/T and U interfaces. RJ45 connector.
- **ISDN Compatibility**: Fully compatible with all major manufacturers, supporting the most important bonding algorithms: J52, Telos and CCS bonding.
- **BackUp** System: ISDN as a secondary link for IP/X21.
✔ **X21** (optional) **interface** available for synchronous digital dedicated lines up to 576kbps.
✔ **Auxiliary data** on RS232 or RS442 ports from 300 to 115200.
✔ **GPIO** • 4 inputs/outputs. User configurable. Remote contact closures.
✔ **Local or remotely (TCP/IP) upgrading** of one or several units at once using the same utility.
✔ Factory software upgrades can be downloaded.

	Width	Height	Depth	Chassis
Nereus	483 mm	133.4 mm	363 mm	3U
Nereus One	483 mm	43.4 mm	363 mm	1U

Nereus rear view