Overview

The VX-MD4024 is a rack-mountable VDSL2 IP DSLAM. It supports two Gigabit Ethernet (GbE) trunk interfaces and 24 VDSL2 ports (ADSLx backward compatible). Its ideal for deploying in space-constrained indoor areas, MDU, or external cabinets. The broadband access solution provides an exceptional way to build an advanced platform to support ITU-T G.993.2 VDSL2 service in an IP network.

Benefits

Expanded Revenue Opportunities
ADSL backward compatibility enables service providers to migrate to VDSL2 service while continue providing existing customers with option of ADSL service.

Compact Design for Limited Space
VX-MD4024 VDSL2 mini-DSLAM occupies only 1U of standard telco rack space for 24 lines. It will easily be fitted in existing Remote Terminals. With optional temperature-hardened design, Versa’s VDSL2 mini-DSLAM is a good fit for outside plant cabinet, indoor rack or wall-mounting enclosures.

High Reliability and Easy Maintenance
VX-MD4024 is equipped with fan and air filter unit; low power requirements plus full diagnostic and alarm reporting capability. Powerful SNMP, CLI, and Web GUI management features yet easy-to-use. Remote login and software download help service providers minimize daily operational costs.
**Features**

- **High Speed VDSL2 Technology:**
  - Supporting VDSL2 service via POTS/ISDN user interface
- **Compact Solution:**
  - Provide 24 ports of VDSL2 via 1U height; 19"(w) x 12"(D)
- **Built-in POTS/ISDN Splitters:**
  - Streamline installation and increase cost-effectiveness
- **Telecom Grade Design:**
  - Flexible Operating Temperature options: 0°C to 65°C or -40°C to 65°C for different deployment needs
  - Relative Humidity: 5% to 95% (non-condensing) at 35°C
- **System Overheating Protection:**
  - FAN alarm indicating if FAN malfunction
  - Temperature monitoring and system overheating trap functionality
  - Automatic power cutoff when system overheating
- **ROHS Compliance:**
  - Compliant with EU 2002/95/EC RoHS Directive.

**Specifications**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>1U: 66mm x 482mm x 304mm (H W D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental</td>
<td>Operating Temperature: -40°C to 65°C (-40°F to 149°F)</td>
</tr>
<tr>
<td></td>
<td>Operating Humidity: 5% to 95% non-condensing</td>
</tr>
<tr>
<td>Power Requirements</td>
<td>AC or DC power option</td>
</tr>
<tr>
<td></td>
<td>DC: 48V DC (42V to 56V)</td>
</tr>
<tr>
<td></td>
<td>Dual A+B -48 V DC power input terminal</td>
</tr>
<tr>
<td></td>
<td>AC: 100<del>240V 50</del>60Hz</td>
</tr>
<tr>
<td>Certification</td>
<td>ITU-T K.20, K.21</td>
</tr>
<tr>
<td></td>
<td>ETSI 300-019, 300-386</td>
</tr>
<tr>
<td></td>
<td>EN 60950</td>
</tr>
<tr>
<td></td>
<td>Conform to CE requirements</td>
</tr>
</tbody>
</table>
# Technical Specifications

## Interface

**Network Interface:**
- 2 x Gigabit Ethernet Combo ports (100/1000 Based-T and SFP- option)

**Subscriber Interface:**
- 24 ports VDSL2 (G.993.2)
- Built-in POTS/ISDN splitter

## VDSL2

- ITUT G.993.2 compliant*
- Profile 8a/8b/8c/8d/12a/1 2b/17a/30a
- ADSL backwards compatible*
- Maximum 20.5 dBm transmit power
- Long-Reach VDSL (VLR)*
- PTM packet Pre-emption
- Loop Diagnostic DETL/SELT

## Service Characteristics

**ATM:**
- QoS (UBR, rt-VBR, nrt-VBR, CBR)
- PVC default priority and PVC-to-VLAN mapping
- Traffic scheduling/shaping/policing

**Ethernet:**
- IEEE 802.1d/w/s Spanning tree protocol (STP/RSTP/MSTP)
- IEEE 802.3ad Link aggregation
- IEEE 802.3af Power over Ethernet (option)

## Network Management

- RS-232 serial and 10/100 Ethernet port for local management
- Multiple TELNET sessions
- Remote software upgrade
- Memory back-up and restore
- Database export and import functionality
- Web-based GUI management
- EMS for Multiple Nodes Management based on SNMP (optional)
- In-band and Out-band management
- SNMP v1 and v2c management

*Denotes features that will be supported via firmware upgrade.
Performance Monitoring

- Monitors of line attenuation, noise margin, current rate, loss of signal, loss of framing loss of power and error second performance data of ADSL/VDSL statistics. Ethernet RMON defined statistics are also provided.
- Provides 15-minute and 1-day counters for history record

Alarm and Status Surveillance

- Automatic alarm/LED indication for alarm and system status
- Maintenance signal for OAM functionality
- Four housekeeping inputs and One alarm contact closure outputs

*Denotes features that will be supported via firmware upgrade.
The VX-MD4024 supports up to 24 VDSL2 lines per 1U box. It supports 802.3ad link aggregation so that it extends the uplink bandwidth up to 2 Gbps. It is also stack-able to provide higher port density.

Users can manage the system with CLI/SNMP/Web GUI via in-band/out-band management channel.

By enabling both GbE ports of VX-MD4024 for uplink traffic, a closed ring topology can be implemented, using spanning tree protocol (STP/ RSTP).