



Tervela® TMX-500 Message Switch™



Third-Generation Messaging

The Tervela TMX-500 Message Switch is a third-generation messaging platform that gives financial services firms and other data-intensive organizations competitive advantage through new levels of application performance, data distribution, deployment flexibility and total cost of ownership.

Unified Scalability

It extends Tervela's TMX product line with a smaller, more flexible, energy-efficient form factor that also sets new benchmarks for messaging performance, latency and connectivity. Like other members of the Tervela TMX product line, it can readily support a workgroup or be combined into a seamless, unified message network delivering unparalleled performance, resiliency and scale.

Open and Extensible

The TMX-500 supports Tervela's Open Data Framework™ to ensure both compatibility with existing applications and de facto standards such as JMS, but also enables new solutions and support for emerging standards like AMQP.

Deployed as a standalone switch or

networked with companion switches for fault tolerance or scalable message processing capacity, the TMX-500 interfaces seamlessly with both existing systems and:

- Tervela TPM Provisioning & Management System™ to offer a single point of management
- Tervela Client API™ to decouple publishers from subscribers
- Tervela TPE Persistence Engine™ to capture all message traffic and address storage requirements
- Tervela TSE Service Engine™ to provision common extensible applications

Powered by TVOS™, Tervela's core operating system, the TMX-500 provides the following messaging capabilities:

- Topic Configuration
- Subscription Quality-of-Service Management
- Entitlement Control
- API Authentication
- Protocol Transformation
- Role Management
- Multicast Assignment

HIGHLIGHTS

Data Center Efficiency

A smaller 2U form factor, ultra low power consumption, variable cooling rates and increased port density allow for much higher messages per watt than any existing platform.

Deployment Flexibility & Ease

Modular configurations of up to 16 ports of 1 Gigabit Ethernet and 4 ports of 10 Gigabit Ethernet per platform that linearly and seamlessly scale to much higher densities ensure efficient business growth without infrastructure pain.

Hallmark Tervela Performance

Scalable performance from 4 million to 64 million messages per second, coupled with a consistent sub 10 microsecond platform latency, are driven by Tervela's new programmable ASICs, FPGAs and processors.

Future Assurance

The TMX-500 has an open architecture necessary for supporting legacy applications, future capabilities and evolving standards while eliminating the need for a data center upgrade.

With separate control and data planes, the TMX drives performance by separating administrative operations from data flows. Tervela's patent-pending hardware-acceleration enables the TMX-500 to handle and automatically filter an unprecedented number of topics across dynamic and diverse message flows. This ensures that the underlying network and participating computing platforms quickly receive only the information they need.

Messaging Performance

Scalable performance from 4 million to 64 million messages-per-second

Guaranteed messaging over 1 million messages-per-second

Workgroup and Enterprise Scale

Support for 4 million discrete topics and wildcarding

Support for 1 million TCP connections

Seamless, scalable, unified clustering

Ultra Low Latency

Switch latency less than 10 microseconds at load

Modular Interfaces

2 Modular and configurable network interface slots

Up to 16 x 1 Gigabit Ethernet

Up to 4 x 10 Gigabit Ethernet with SFP+ transceivers

Management Interfaces

2 Gigabit Ethernet (Management)

2 DB9 Serial Console Port - front and rear access

High-Availability

High-availability configuration with no-loss recovery

100% solid state storage for speed and reliability

Full thermal and environmental monitoring with variable N+1 redundant cooling

Dual hot-swappable redundant power supplies

Advanced Hardware Acceleration

New Tervela programmable ASICs and FPGAs for unparalleled performance

Management Subsystem

New Intel-powered management subsystem processor

Runs TVOS™ management software

Integrated Tervela ClearView™ management monitor

Full SNMP support

Low Power Consumption

Less than 250 watts of power consumption

Fast Installation

Tervela QuickRack™ mounting system

Physical Specifications

2U: 3.5" (89 mm) h x 17.25" (438 mm) w x 28.8" (718 mm) d

45 lbs. (20.4 kg)

Power Requirements

100-240V; 47-63Hz; 250W; 852 BTU/hr

Operating Environment

Airflow: Front to Back

Operating: 41° to 95° F (5° to 35° C)

Storage: -40° to 158° F (-40° to 70° C) Non-Condensing

Environmental

FCC Part 15, Class A

AN/NZS CISPR 22, Class A

ICES-003, Class A

CSA 60950-1-3

EN 55022, Class A

UL 60950-1

RoHS Compliant

Contact Tervela

Tervela offers comprehensive solutions and a wide range of service and support programs to ensure customers exceed business performance objectives. Bring a new level of service and performance to your organization. Call +1 646.586.4200, visit www.tervela.com or email info@tervela.com today.