TLX12 MATRIX SWITCH

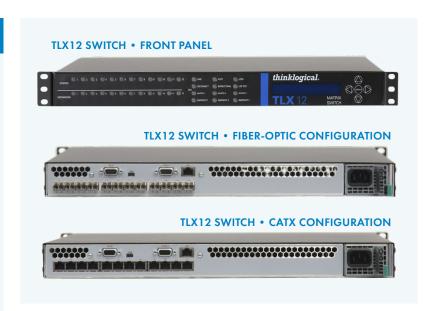**thinklogical.**
A **BELDEN** BRAND

The TLX12 offers a compact, high performance, non-blocking matrix switch for complete, end-to-end routing of video, audio, USB and other computer peripheral signals. The 1RU matrix is available in fiber or CATx connectivity options and may be configured as a unidirectional 12x12 or a bidirectional 6x6 switch. The TLX12 incorporates a push button interface for simplified access and control. All TLX switches support up to 10Gbps per port of uncompressed bandwidth for low-latency signal management.

PRODUCT FEATURES

- Space-saving 1 RU chassis
- Available with 12 fiber-optic or 12 CATx transmit/receive ports
- Configurable up to a 12x12 matrix switch
- Up to 10Gbps uncompressed bandwidth per port
- Re-clocking technology maintains signal integrity
- Completely non-blocking architecture
- Multicasting and macros supported
- SNMP control protocol
- Controllable via LAN or serial connection
- MTBF of over 100,000 hours
- Hot-swappable optical modules
- Transferable modular power supply
- Optional push button front panel control interface
- Compatible with Thinklogical's System Management Portfolio (SMP) software for complete switch control and management

TLX12 SWITCH • FRONT PANEL

TLX12 SWITCH • FIBER-OPTIC CONFIGURATION

TLX12 SWITCH • CATX CONFIGURATION

SPECIFICATIONS

DISTANCE	CAT6a: 100m; Single Mode: 80km · OS2 (9/125). Multi-Mode 400m · 33m: OM1; 82m: OM2; 300m: OM3; 400m: OM4
OPTICAL WAVELENGTH	Multi-Mode: 850nm; Single Mode: 1310nm (CWDM/DWDM call)
OPTICAL DATA RATE	50Mbps to 10Gbps per port; Switching Capacity: 120Gbps
CATX DATA RATE	10Gbps per port; Switching Capacity: 120Gbps
ENVIRONMENTAL	Operating Temperature: 0°C-50°C
HUMIDITY	5-95% RH, non-condensing
COMPLIANCE	Approvals for United States of America, Canada, and European Union
WARRANTY	One year · Extended warranties available for purchase
MOUNTING BRACKETS	19" Rack Mounting Brackets Included
POWER CONSUMPTION	200 Watts
SUPPLY VOLTAGE	Universal AC Power Supply, 100-240VAC, 47-63Hz
WEIGHT	13lbs (5.90kg)
DIMENSIONS [TOLERANCE ± 0.039" (1.00MM)]	
RACK SIZE (WIDTH)	EIA 19" (482.90mm)
HEIGHT x DEPTH	1RU 1.72" (43.69mm) x 16.56" (420.50mm)
SOFTWARE UPDATES	Console/LAN
FIRMWARE UPDATES	Mini USB Connectors (1)
RS-232 SERIAL PORTS	DB9 Female Connectors (1)
10/100 NETWORK	RJ45 Connector (1)

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
MATRIX SWITCH CHASSIS	
TLX-MSC-C00012	TLX Matrix Switch Chassis with 12 CATx Ports, 10G
TLX-MSC-M00012	TLX Matrix Switch Chassis with 12 Multi-Mode Fiber Ports, 10G
TLX-MSC-MV0012	TLX Matrix Switch Chassis with 12 Multi-Mode Fiber Ports, 6G+
TLX-MSC-S00012	TLX Matrix Switch Chassis with 12 Single-Mode Fiber Ports, 10G
TLX-MSC-SV0012	TLX Matrix Switch Chassis with 12 Single-Mode Fiber Ports, 6G+
CABLES INCLUDED	(1) AC Power Cable & (1) CAT 5, 4.5m (CBL000001-015FR) (1) 24" 1.0/2.3 to Female BNC Cables per Coaxial Port
SPARE MODULES	
TLX-MSM-P00012	TLX12 Matrix Switch Power Supply

JITC CERTIFIED

NIAPC Evaluation Scheme
NATO IACD
INFORMATION ASSURANCE TC
NCI AGENCY

TEMPEST
SDIP 27 Level B

Common Criteria EAL4

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TLX MATRIX SWITCHES

SECURE MATRIX SWITCHING SOLUTION FOR HIGH RESOLUTION VIDEO DISTRIBUTION & KVM SYSTEMS

Thinklogical's TLX Matrix Switches are high performance, modular, non-blocking switches for complete, end-to-end switching of over multi-mode or single mode fiber-optic cable or CATx copper cable.

Supporting video resolutions up to 4K@60Hz 4:4:4, TLX features near instantaneous switching of DisplayPort and HDMI video, audio, USB and computer peripheral signals. Compatible with both Thinklogical TLX and Velocity series extenders, TLX Matrix Switches offer scalability, flexibility, security and resiliency for any size audio-visual switching application.

HIGHEST PERFORMANCE WITH EASIEST INTEGRATION

TLX Matrix Switches support uncompressed 10Gbps bandwidth per port, preserving signal integrity to provide high resolution video with no artifacts, added latency, or lost frames. Thinklogical's patented re-clocking technology ensures that every video and data stream is delivered in perfect synchronization.

TLX switches are protocol agnostic, supporting all common video, audio and computer peripheral signal interfaces and formats, allowing for easy integration into existing infrastructures. With TLX, users can consolidate all their signal switching requirements into a single chassis for enhanced productivity and reduced equipment maintenance and operational costs.

Switching systems may be configured with multi-mode or single mode fiber optics and/or CATx copper cable connections for increased flexibility in hybrid environments. Designed with completely non-blocking architectures, Thinklogical matrix switches offer the ability to configure each port on the switch as an input or an output and switch between all ports, maximizing system efficiency.

INFORMATION ASSURANCE (IA) ACCREDITATIONS

Thinklogical's VX and TLX line of switches are the only mid-to-large-scale fiber optic KVM and video matrix switches in the world that have achieved IA accreditation to The Common Criteria EAL4, TEMPEST SDIP 27 Level B, NATO NIAPC Evaluation Scheme: GREEN status, and the U.S. DoD DISA JITC UCR APL 2013.

These certifications verify that Thinklogical has met the stringent information assurance directives for use in secure defense, intelligence, and homeland security facilities worldwide. This includes the capability to switch and distribute multiple classification information through a single switch chassis while maintaining network isolation, reducing the need to air-gap systems to meet security requirements.

EXCEPTIONAL RELIABILITY, REDUNDANCY AND RESILIENCY

TLX Switches are designed to maximize system uptime for mission-critical applications. In addition to a Mean Time Between Failure (MTBF) of over 100,000 hours, the modular architecture of TLX Switches allow users to hot swap all critical system components. Power supplies, fan trays, control cards, input/output cards and pluggable optics are hot-swappable, to minimize system downtime in the unlikely event a component should fail.

Scalable from 12 to 1280 ports, TLX Matrix Switches are ideal for AV applications of all sizes.