XENOPTICS
SOFTWARE DEFINED PATCHING

Defense Solutions

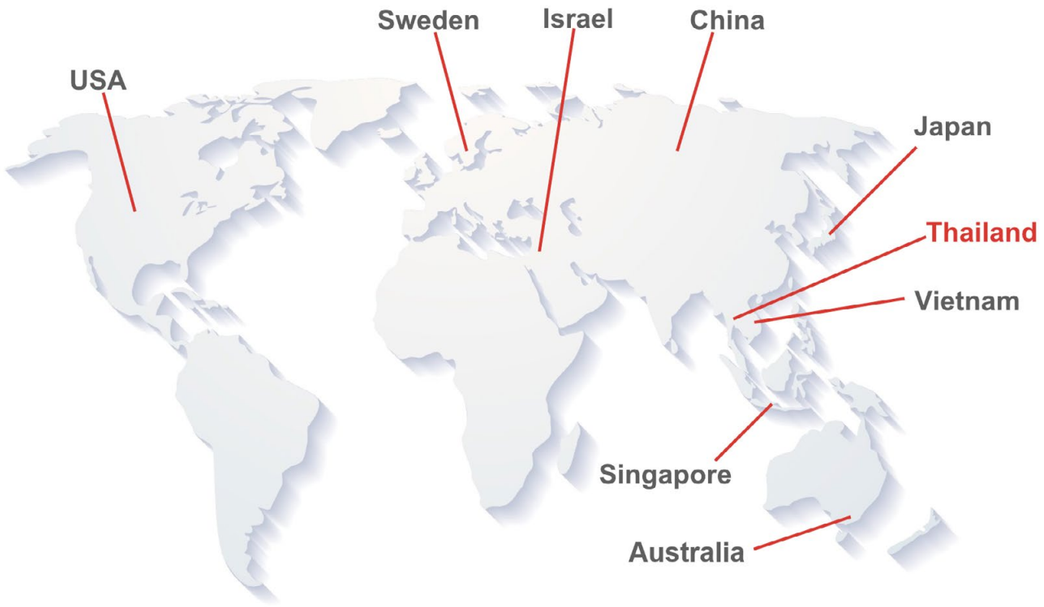
Who We Are

XENOptics: Connecting Innovation

Founded in 2016, XENOptics is dedicated to automating fiber optic networks at the Layer 0 level—the foundational layer where core network capabilities begin. By enabling remote control and automation of connections, disconnections, testing, and network monitoring, XENOptics aims to modernize network operations with a fully software-defined approach.

Our patented, robotic fiber switches provide the first fully non-blocking, non-disruptive and passive connectivity for Layer 0. The innovative modular design delivers robust capabilities in a field serviceable unit.

XENOptics' R&D and manufacturing base is in Thailand, with sales and technical partners in key markets globally.



CSOS-72SRLC

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FiberTron Hive-200
from OPTOKON®

The FiberTron Hive-200 from OPTOKON is a rugged, fully autonomous mobile base designed to deploy and manage up to 200 drones.

Each drone is individually tethered via light weight fiber rolls containing up to 15kms of fiber for secure data transmission. In this way, the drones become immune to radio jamming and free to fly their missions with operators removed to a safe distance and communicating with the Hive via satellite, fiber or radio links. The FiberTron Hive-200 delivers flexible, interference resistant operation of drone capability in any environment.

XENOptics' Smart Optical Switches form the core of the network control for the operators and the drones, providing remote switching between drones as they are activated for duty.

The FiberTron Hive-200 is built in partnership with OPTOKON, a leading supplier of fiber optics solution and optoelectronic technology for defense in Europe and globally. See more at www.optokon.com.

Learn More:

Read **Watch**

OPTOKON FiberTron Hive-200

Bases and Forward Command Centers

Enabling Secure Connections to Unmanned and Remote Sites

Create a dynamic, resilient and highly available data and comms network with XENOptics Smart Optical Switches. Ideal for dark and edge data centers, remote sites and forward command bases.

Take full, remote control of the network and all the Smart Optical Switches through secure Network Management Software and all connections at the source with our Element Management Software.

Smart Optical Switches are easy to deploy in compact, rack mountable form factors. Rugged, self-cleaning, and AI enabled robotics ensure consistent connections. Fully passive latching design ensures reliable connections even in power outages.

Managing operations in a fully remote and un-manned way provides an extra layer of security to network operations which is essential in 21st century defense environments.

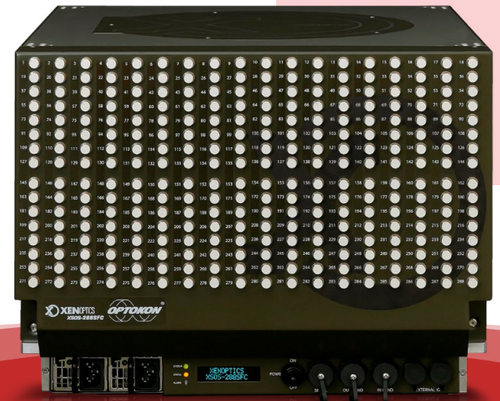
Labs, Testing, Research and Development

Rapid Reconfigurations and Management of Fiber Networks

Fiber optics for data and comms are the backbone of modern networks where large volumes of data are required. XENOptics Smart Optical Switches create a fully managed, remotely automated network where all fibers are tracked and managed through a central command portal.

Highly secure, efficient and agile networks using Smart Optical Switches are deployed for testing, R&D, comms and data networks.

Managing operations in a fully remote and un-manned way provides an extra layer of security to network operations which is essential in 21st century defense environments. Remote management ensures that core Layer 0 network operations are tamper-proof and secure end-to-end.



XENOptics Smart Optical Switch

XSOS-288 or XSOS-576 with LC or FC

The original Smart Optical Switch, with 144 x 144 non-blocking connections and field replaceable parts makes the XSOS the foundation of dynamic fiber networks.

XSOS delivers high performance, low optical loss and ease of deployment in a standard rack mountable format.

XSOS provides flexible termination options, including spliced fibers, LC connectors, and the latest FC ruggedised connectors.

XSOS-288, XSOS-576

PARAMETER	UNIT	MIN	TYP	MAX
Optical Characteristics				
Operating Range	**nm**	**1260**		**1630**
Insertion Loss (spliced version)	dB		0.25	0.5
Insertion Loss (connectorized version)	dB		0.50	0.8
Insertion Loss Repeatability	dB		0.06	0.1
Crosstalk	dB			-70
Return Loss (UPC/APC)	dB			-55 / -65
PDL	dB			0.15
PMD	psec			0.1
Input Power	dBm			25
Switching Time	Sec		35	60
Power Requirements				
Input Voltage	V_{DC}		110-220	
Input Voltage (optional)	V_{DC}	-40		-75
Power Consumption (switching Operation)	W			50
Power Consumption (standby)	W			6
Power Consumption (sleep mode for OSP)	W	0.1		0.5
Environmental Conditions				
Temperature Range	^{0}C	-5		+45
Temperature Range (street cabinet)	^{0}C	-40		+65
Temperature Range (Transport)	^{0}C	-40		+70
Relative Humidity	%	10		95
Reliability				
Service Lifetime	Years	20		

Learn More:

XSOS-288 XSOS-576D Watch

CSOS

The new Compact Smart Optical Switch provides 72 or 144 non-blocking connections in a new compact, modular form factor.

With support for outside plant (OSP) deployments and advanced diagnostics, CSOS provides capabilities to stretch defense fiber networks into new domains delivering high performance secure data and comms.

PARAMETER	UNIT	MIN	TYP	MAX
Optical Characteristics				
Operating Range	**nm**	**1260**		**1630**
Insertion Loss (spliced version)	dB		0.60	1.0
Insertion Loss (connectorized version)	dB		0.50	1.0
Insertion Loss Repeatability	dB		0.06	0.1
Crosstalk	dB			-70
Return Loss (UPC/APC)	dB			-55 / -65
PDL	dB			0.15
PMD	psec			0.1
Input Power	dBm			25
Switching Time	Sec		24	40
Power Requirements				
Input Voltage	V_{DC}		110-220	
Input Voltage (optional)	V_{DC}	-40		-75
Power Consumption (switching Operation)	W			50
Power Consumption (standby)	W			6
Power Consumption (sleep mode for OSP)	W	0.1		0.5
Environmental Conditions				
Temperature Range	^{0}C	-5		+45
Temperature Range (street cabinet)	^{0}C	-40		+65
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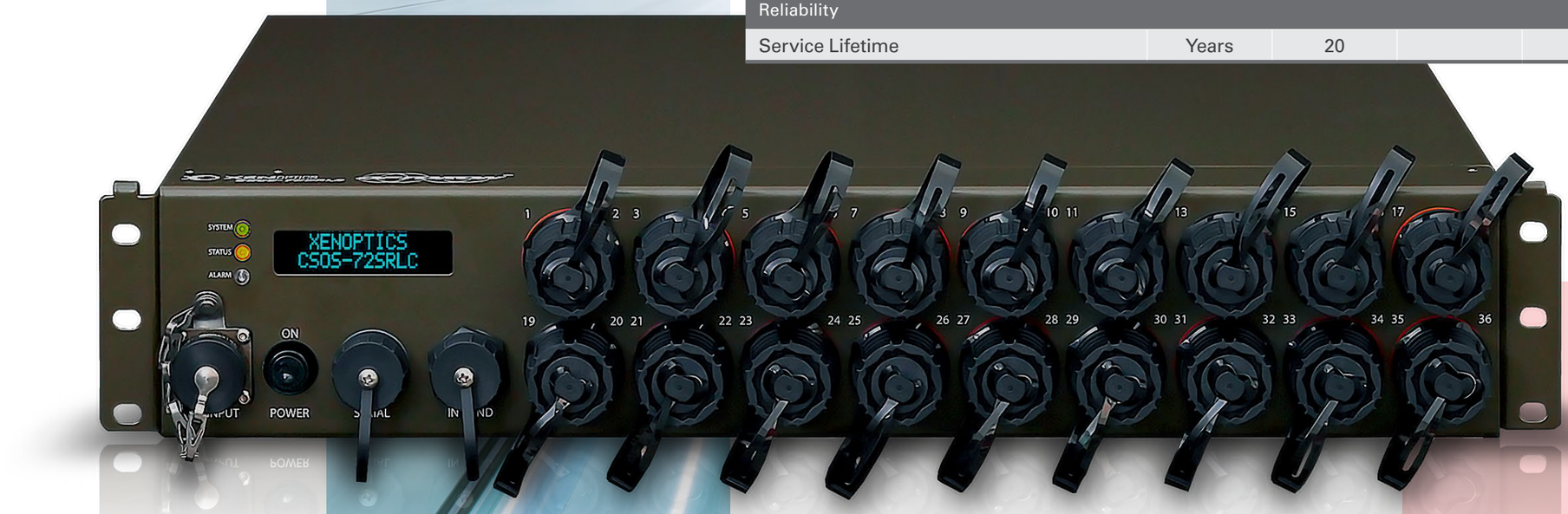
Reliability				
Service Lifetime	Years	20		



Learn More:

NMS / EMS

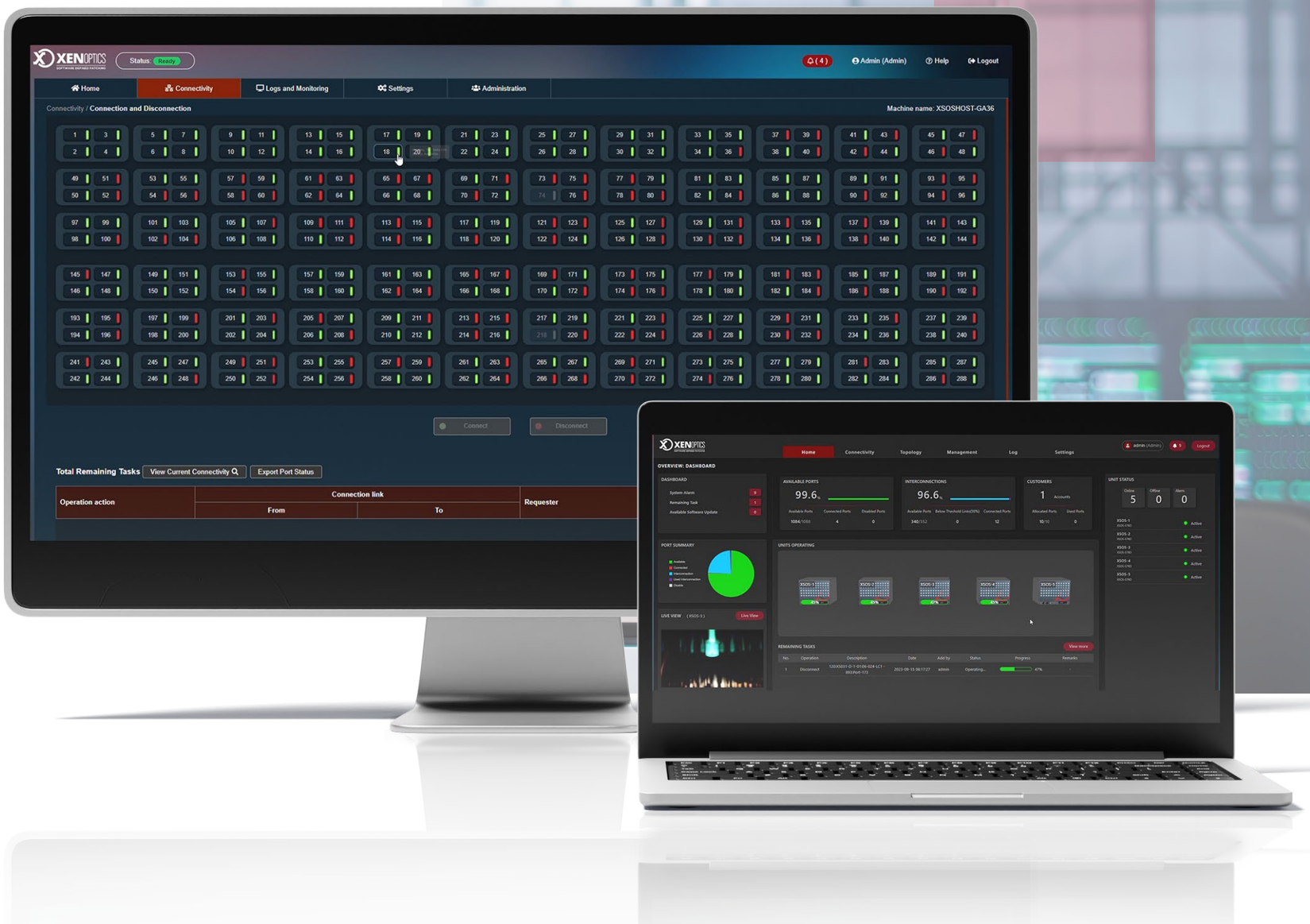
XENOptics Provides Secure Software Tools to Manage your Smart Optical Switch Network

The Network Management System (NMS) enables drag and drop visualization of your network, and full remote testing and configuration of connections between the different Smart Optical Switches.

EMS

The EMS provides detailed, fine control of connection and disconnection within a single Smart Optical Switch. Schedule connections and disconnections, or manage them in batches. Remotely test and track all your network fibers.

Learn More:



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CONTACT US

Contact XENOptics to arrange a demonstration of the XENOptics Smart Optical Switch, and a deep dive in the NMS/EMS software. View full range of XENOptics products and solutions on our website.

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