Glimmerglass
Cyber Solutions

Intelligent Optical Systems

Product Family Overview

Glimmerglass Intelligent Optical Systems

Industry Leading Capabilities

- Industry's most compact / highest port density photonic cross-connect
- Bit rate independent - supports all optical data rates including 100 Gb/s
- Protocol and format independent; compatible with SONET/SDH, Ethernet, C/DWDM, Video, FC, FICON, ESCON, and all others
- Matrix size: 16x16 to 192x192 fiber ports
- Asymmetric configurations
- 20 millisecond switching
- Ultra-low power consumption: < 85 Watts
- Supports dark and very low power connections
- Single mode fiber, wideband (1270 nm - 1630 nm)

Easy to Manage and Use

- Glimmerglass CyberSweep™
- SNMPv3
- Web-based single-system user interface
- Import and export topologies
- Command-Line Interface (TL1)

Outstanding Reliability

- MTBF > 30 years
- Delivers 99.999+% availability
- In-service software upgrades
- Dual -48V DC or redundant, hot-swappable AC power option

Advanced Optical Signal Management

- Easy integration into Glimmerglass CyberSweep for advanced network management and monitoring
- Virtual Private Switch (VPS) allows administrators to partition ports for individual user access
- Auto tuning to preserve performance over time
- Threshold crossing alerts
- Protection switching rules
- Dark fiber switching
- Photonic multicasting for connecting point to multipoint
- Dedicated or switched Variable Optical Attenuation (VOA) to control output power levels
- Bidirectional operation

System 600
32x32 - 192x192

System 100
16x16 - 96x96

System 500
32x32 - 192x192

Optical Network Management and Monitoring

Glimmerglass Intelligent Optical Systems are the solution of choice for network operators responsible for managing and monitoring large optical networks.

Intelligent Optical Systems are supported by a robust software suite that bridges the gap between software defined networking and physical layer management. Control algorithms for the hardware include an auto tuning feature that makes physical performance particularly resilient to the effects of time, vibration and temperature – a critical feature for the management of live customer traffic.

Intelligent Optical Systems are a key component of the Glimmerglass CyberSweep™, a fully integrated cyber security/ cyber defense solution that runs on the CyberSweep platform. Their unique capabilities enable the dynamic selection and distribution of optical signals for analysis and storage.

Whether managed by Glimmerglass CyberSweep or used as stand-alone solutions, Intelligent Optical Systems from Glimmerglass allow operators to:

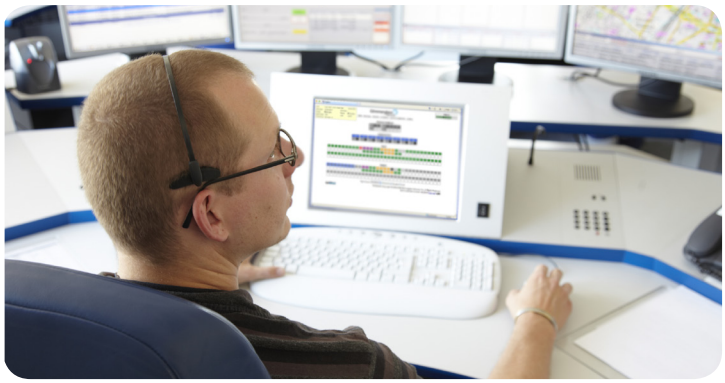
Create – remotely establish optical signal paths in milliseconds

Monitor – access signals for analysis in real time without disrupting traffic

Reconfigure – select, duplicate, and distribute optical signals to one or many locations

Intelligent Optical Systems

Product Family Overview



Glimmerglass CyberSweep

Glimmerglass CyberSweep is a powerful, scalable solution for extracting actionable information from optical signals. The CyberSweep platform manages the end-to-end process from selecting signals from an optical network, to extracting and monitoring the actionable information.

ClickFlow

Glimmerglass ClickFlow is an embedded, web-based management GUI that comes with every Intelligent Optical System. ClickFlow provides the user with at-a-glance monitoring of optical power levels and connection status as well as point-and-click provisioning of new connections. ClickFlow also provides access to real-time connection reports, connection and port configuration, user management, hardware alarms, and system configuration. ClickFlow is a secure environment that requires authentication.

SNMP

The embedded SNMP agent allows a SNMP manager to monitor, reconfigure, and manage a Glimmerglass Intelligent Optical System with SNMP Gets, Sets, and Trap functions. SNMP version 3 with compatibility to v2 and v1 is supported.

TL1 Command-Line Interface

Transaction Language 1 (TL1) is a management protocol defined in Bellcore Generic Requirements GR-831-CORE. The Glimmerglass Intelligent Optical System extends the TL1 language with a command set that enables command-line and programmatic operation and monitoring of the system.

Markets Served

The ability to quickly create, monitor and reconfigure optical paths has made Glimmerglass Intelligent Optical Systems a mainstay in applications across a range of Cyber Security, Lawful Interception, and Telecom environments.

Cyber Security and Lawful Interception

Glimmerglass Intelligent Optical Systems enhance the Glimmerglass CyberSweep solution by enabling dynamic selection and distribution of signals for analysis and storage.

Defense

Defense agencies worldwide employ Glimmerglass solutions for enhanced monitoring and management of mission critical optical networks.

Telecom Central Offices/POPs

International Service Providers use Glimmerglass Intelligent Optical Systems to gain visibility and control of their optical networks. With Glimmerglass, Service Providers gain enhanced monitoring and response to threats and failures.

Undersea Cable Landing Stations

Glimmerglass Intelligent Optical Systems improve network availability of undersea cables through enhanced monitoring and signal management.

Cyber Lab Automation

Glimmerglass Intelligent Optical Systems combine reliable, field-proven hardware with intuitive management software to create a dynamic optical fabric for lab environments.

Glimmerglass Cyber Solutions
26142 Eden Landing Road
Hayward, CA 94545 USA

Phone: 510.723.1900
In North America: 877.723.1900
Email: sales@glimmerglass.com

Glimmerglass
Cyber Solutions