

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Visit our website - *Click HERE*

Finisar®

Xgig Protocol Analysis and Test Platform

Comprehensive Multi-Protocol Analyzing and Testing for Fibre Channel, SAS/SATA, and Ethernet (including FCoE and iSCSI)



- Accelerate New Product Development
- Improve Quality and Reliability
- Reduce Cost and Ensure Interoperability

FINISAR'S XGIG® PROTOCOL ANALYSIS AND TRAFFIC GENERATION PLATFORM:

- Accelerates new product development thus reduces development costs
- Improves product quality and reliability
- Helps to ensure product interoperability

Xgig's unified platform supports simultaneous analyzing and testing of multiple protocols based by the industry's most comprehensive range of analysis and test functions in a single chassis:

Protocols

- Up to 8 Gb/s Fibre Channel
- Up to 6 Gb/s SAS/SATA
- 1 Gb/s and 10 Gb/s Ethernet, including FCoE and iSCSI

Functions

- Analysis
- Error Injection (Jamming)
- Bit Error Rate Testing
- SAS/SATA Traffic Generation
- Fibre Channel Load Testing

With Xgig, users gain unmatched visibility into network interactions for streamlined identification and resolution of even the most difficult network performance impairment and reliability issues. With advanced features such as cross triggering (internal and external) and Expert analysis, it is the ideal tool for solving challenges with today's high-speed serial buses.

FINISAR'S XGIG PLATFORM

Xgig is a unified, integrated platform employing a unique chassis and blade architecture to provide users with the utmost in scalability and flexibility. Various blades support a wide range of protocols and can easily be configured to act as a Protocol Analyzer, Jammer, BERT, Traffic Generator, and Load Tester all without changing hardware.

Xgig can be placed either directly in-line on a link or connected using Finisar's family of copper or optical TAPs. Additionally, multiple Xgig chassis can be cascaded together to provide up to 64 time-synchronized analysis/test ports across multiple protocols, enabling correlation of traffic across several devices and network domains. Xgig is the only protocol analyzer supporting multiple protocols in a multi-functionality environment, all within the same chassis.

Xgig's ease-of-use and flexibility are important features for accelerating product development and testing. Users access all protocols and analyzer functions using an intuitive and unified GUI-based suite of applications—TraceControl, PerformanceMonitor, TraceView, and Expert—that run on a Windows management PC connected through a GbE and LAN connection. The Maestro application suite manages the multi-functional capabilities of Xgig protocol blades, providing a common interface for all functions as well as allowing management of multiple tests in the same screen and driving different functions concurrently. Xgig gives users full visibility and access to traffic while enabling remote monitoring and powerful analysis.

For ultimate flexibility and control, some GUI functions and configurations are also accessible through the Application Program Interfaces (API) that leverages test customization, and automation via scripts and FRunner. Scripts based on C/C++, Perl, Python, or TCL/TK, allow users to design any combination of triggers and controls, and accelerate development by enabling them to automate and manage regression testing for debugging and manufacturing that would otherwise be time-consuming to configure and manage through the GUI.

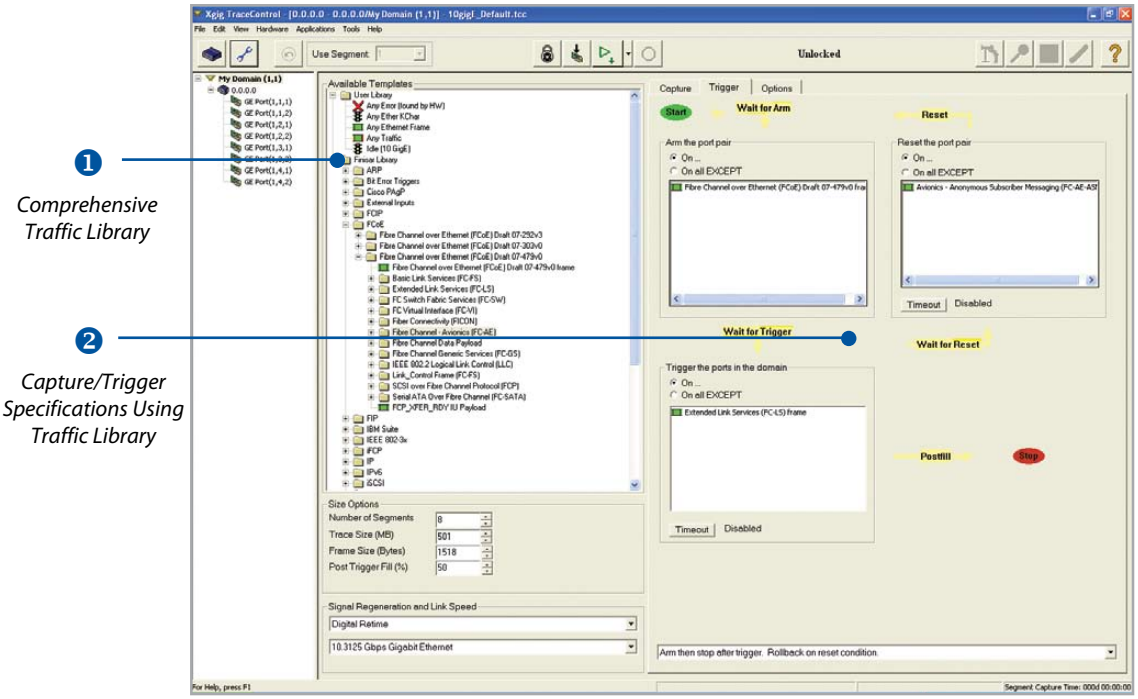


Figure 1: Xgig TraceControl

TRACE CONTROL

TraceControl (see Figure 1) enables users to specifically define the operating conditions under which the Xgig Analyzer captures data. With its ***advanced triggering capabilities***, TraceControl eliminates huge trace files and tedious manual searches by allowing users to capture exactly the data they need to resolve network issues quickly and efficiently. For example, configure TraceControl to trigger on a specific network traffic condition (such as a certain frame type) before initiating capture. In addition to providing a ***comprehensive Traffic Library*** 1 of pre-defined templates for frames, ordered sets, and errors, Xgig also enables defining ***Capture/Trigger Specification Using Traffic Library*** 2 to support multi-level trigger events, including timeouts, missed events, and a wide range of specific conditions.

Xgig's Analyzer software provides the capability to divide the Xgig's buffer memory into different buffer segments. Buffer segmentation allows the Xgig to perform multiple captures within the blade's capture buffer. Xgig allows specification of equal size sub-segments of the buffer memory up to a maximum of 128 segments.

PERFORMANCE MONITOR

PerformanceMonitor (see Figure 2) analyzes live traffic over active links and provides ***real-time performance metrics*** and ***data error reporting***. As with TraceControl, users can set clock rates and the type of signal retiming for ports directly from PerformanceMonitor.

Intuitive graphics enable users to quickly evaluate link status through a variety of snapshots that display the current running state of links as well as total statistics over time, including MB/s, Kframes/s, utilization percentages, frame statistics, frame errors, and physical layer errors from both directions of every link. ***ChartView*** 3 shows performance metrics over time while ***ListView*** 4 displays real-time performance data in a tabular format. The units for each column are user-selectable via the tabs at the bottom of the table. ***MeterView*** 5 shows the current transfer rate and its metered representation. ***LEDView*** indicates the current status of all ports, while ***LED SummaryView*** indicates the summary status of all ports as well as the number of ports sharing a particular state.

TRACE VIEW

TraceView (see Figure 3) is an essential analysis tool for multi-protocol networks, providing simultaneous display of Fibre Channel, Ethernet, FCoE, iSCSI, and/or SAS/SATA data traffic to assist users in analyzing traffic as it passes through the network and different protocol domains. With its spreadsheet-like view 6, TraceView simplifies interpretation of captured trace data by listing each trace

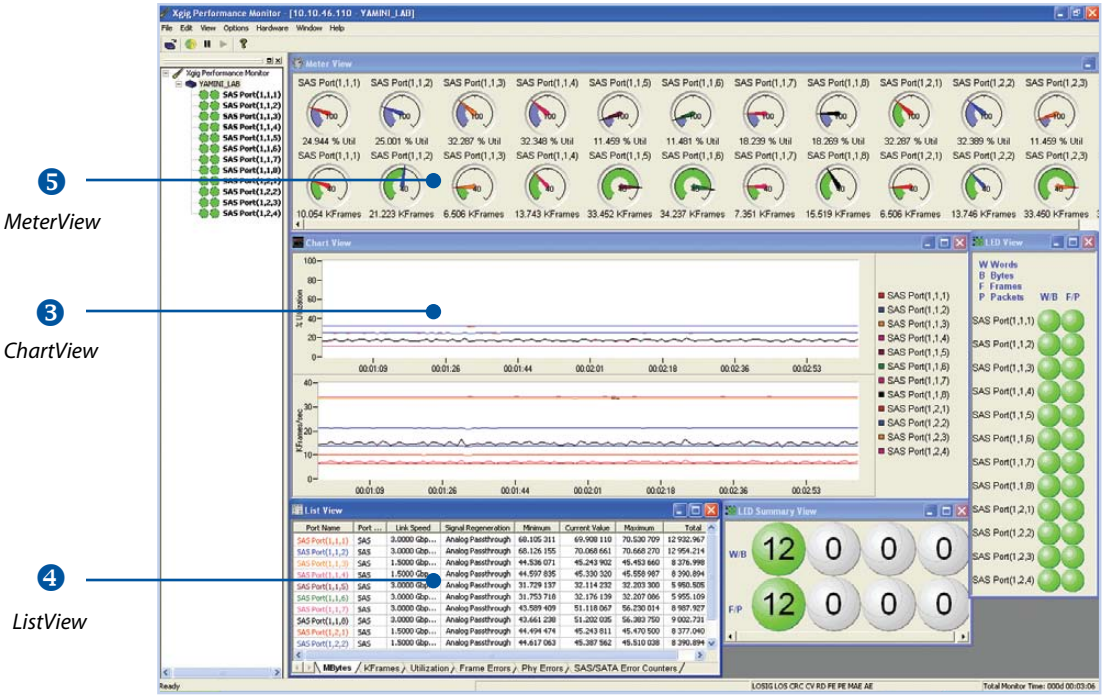


Figure 2: Xgig PerformanceMonitor

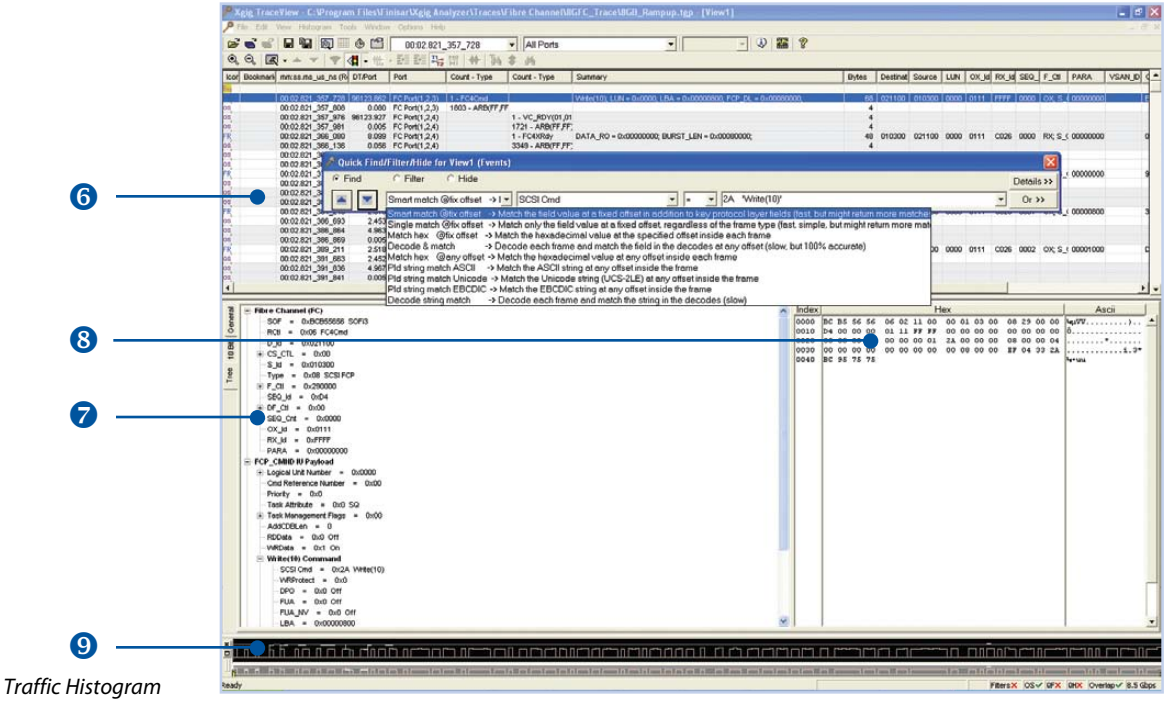


Figure 3: TraceView for Enhanced Trace Analysis

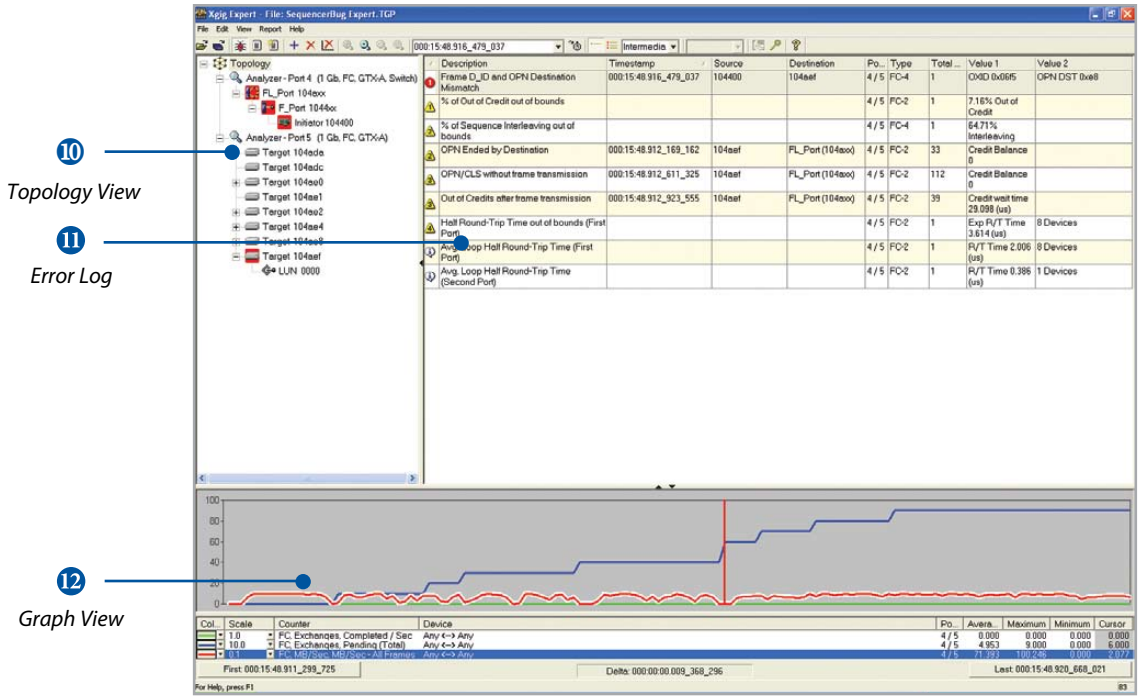


Figure 4: Xgig Expert

event in its own row detail information displayed in the lower pane's DWORD View, and analysis of the captured data for each event displayed in columns. TraceView gives users incredible flexibility, enabling them to add, delete, and move columns to customize each debugging session.

With its ***Data Inspector*** pane, TraceView displays a detailed interpretation of all the raw data of an event on the left 7 and the hexadecimal values for the event and their ASCII or EBCDIC representations on the right 8. The hexadecimal area can be conveniently sized for anywhere between 4 and 32 bytes of data per line. Users are able to view single events in complete detail from the spreadsheet display within the Data Inspector pane. Several other views are also available for displaying event data, including an ***8b/10b Data View*** and ***Tree View*** which help users during trace debugging to understand and correlate frame structure fields with their corresponding ASCII and HEX values. To change events, users simply select a new event in the spreadsheet display.

TraceView also provides a ***Traffic Histogram*** 9 representing the entire trace from start of capture to end of capture. Users can expand and collapse the histogram to analyze a portion of the trace in greater detail. ***Bookmarks*** enable marking locations for later reference and quick access. ***Quick Find/Filter/Hide*** tools provide nine intelligent filters for masking out frames or other event information, enabling users to remove extraneous events from the display based on the value of specific fields. For example, users can easily hide data from all other ports when troubleshooting events on a specific port.

EXPERT

Xgig Expert (see Figure 4) is Finisar's advanced debugging and analysis tool for quickly identifying network problems and impairments. Expert is unmatched in its ability to automatically sort through millions of events to identify performance, upper layer protocol, and logical and physical layer issues. With the ability to check on more than ***1200 Expert symptoms*** as well as apply more than ***1800 metrics*** for enhanced calculations and reporting, Expert assists users in quickly identifying, locating, and resolving protocol violations, interoperability problems, performance issues, and a wide range of problematic network behaviors. With its advanced capabilities, users can identify issues early on before they result in brownouts or network shutdown. In addition, Expert is backed by extensive help files and detailed case studies which provide direct tutorial guidance for improving debugging techniques, detailed explanations of network issues, and suggested solutions to accelerate problem resolution.

Expert's ***Topology View*** 10 shows the network topology as derived from the trace data. This topology is built using advanced network detection and topology determination algorithms, reveal-

ing all devices that are actively participating on monitored links. The ***Error Log*** (11) lists Expert Errors, Warnings, and Information Events that have been identified within a trace. When processing a trace, Xgig Expert rebuilds protocol stacks and layers to robustly identify erroneous and other undesirable behaviors within the network. ***Graph View*** (12) displays a highly configurable time-based graph representing activity within a trace. Activity can be tracked for individual or aggregated devices. Data from multiple Xgig Analyzers can be overlaid onto the graph, allowing for simultaneous analysis of all links involved in a transaction or exchange, even when crossing protocols.

MULTI-FUNCTIONALITY

Xgig is a highly flexible, multi-functional platform which enables users to analyze and debug multiple protocols simultaneously. With its multiple-board, configurable architecture, users can cost-effectively scale Xgig's analysis capabilities to analyze a wide range of protocols while applying advanced analysis, jamming, bit error rate testing, Fibre Channel load testing, and SAS/SATA traffic generation functionality, all in the same chassis. With its extensive feature set, Xgig provides users with a comprehensive network analysis toolbox at a fraction of the cost of purchasing individual tools.

Xgig blades are available for the following protocols: Fibre Channel (1.0, 1.5, 2.0, 3.0, 4.0, and 8.0 Gb/s), SAS/SATA (xx 3.0, and 6.0 Gb/s), and Ethernet (1 and 10 Gb/s)—including FCoE and iSCSI. As multi-functional capabilities (Analysis, Jamming, BERT, FC Load Testing, and SAS/SATA Traffic Generation) are supported by each blade, there is no need to change hardware to switch between functions or protocols.

Analysis

Xgig Analyzer gives users the ***extensive visibility*** into networks they need to resolve even the most tenacious errors and impairments. With the ability to ***record all traffic*** between any two end points, users are able to ***share trace files*** with other users as well as perform intensive offline processing.

Error Injection/Jamming

Xgig Jammer manipulates network traffic in order to ***simulate errors in real time***, enabling users to verify the responsiveness and robustness of error recovery processes. Errors can be precisely defined and timed, making it possible to not only thoroughly test networks but ***automate most of the testing process***. Logically, Xgig Jammer is transparent to the network, appearing simply as an additional length of cable. Used in conjunction with one or more Xgig Analyzers, Xgig Jammer passes traffic through until a specific sequence of events is detected. Xgig Jammer then makes user-defined modifications to specified frames or ordered sets to trigger errors, and the system's recovery response is captured for analysis.

Bit Error Rate Testing (BERT)

Xgig BERT gives users the tools necessary not only to confirm that networks meet minimum data integrity standards but also to present these results in ***industry-accepted report formats*** to facilitate certification. With Xgig BERT, data integrity testing is simplified, enabling users to inject data patterns into the traffic stream that create ***worst-case data loading*** conditions and ***stress a network's physical layer*** to its limits. It can also significantly ***reduce manufacturing test times*** for hubs, host bus adapters, FC RAIDs, and other active or passive devices by stressing all of the components in the data path.

Users can select from a wide range of industry-standard worst-case data patterns specifically developed to check frequency response, data dependencies, and network interface components. ***Bit-by-bit comparison*** detects any differences between transmitted and received data, counting and capturing errors for additional analysis to further improve network robustness. Users can also create their own unique data patterns to meet special test requirements.

For Fibre Channel and Ethernet applications, including FCoE and iSCSI, data integrity testing is complicated by the fact that devices in the data path may make allowable modifications to traffic which will appear as differences in bit-by-bit comparisons. As Xgig BERT is ***protocol-aware***, these modifications are recognized and therefore not reported as errors, greatly simplifying verification.

FC Load Testing

Fibre Channel devices must be able to withstand ***sustained bursts of traffic*** without losing data. Xgig Load Tester loads Fibre Channel links with as much traffic as possible to verify that links can manage high traffic loads gracefully, maintaining network performance and reliability.

SAS/SATA Traffic Generation

Xgig Generator enables developers to comprehensively test SAS/SATA devices from a ***protocol perspective***. Designed with the maximum flexibility in mind, Xgig Generator allows the ***creation of arbitrary traffic*** to give developers the confidence that their networks and devices will reliability handle any possible traffic they might encounter in the course of a network's operation.

XGIG PACKAGE OPTIONS

The Xgig Chassis (see Figure 5) is available as a portable one-slot chassis which accommodates one blade, a two-slot chassis which accommodates two blades, and a four-slot chassis which accommodates four blades. The two- and four-slot chassis are rack-mountable.

Key Xgig Chassis Features:

1. Console Port for Local Configuration
2. Tap Control via Software (reserved for future use)
3. Cascade Ports
4. TTL Inputs/Outputs for external triggering and control
5. 10/100/1000 LAN Connection for Software Control an Configuration

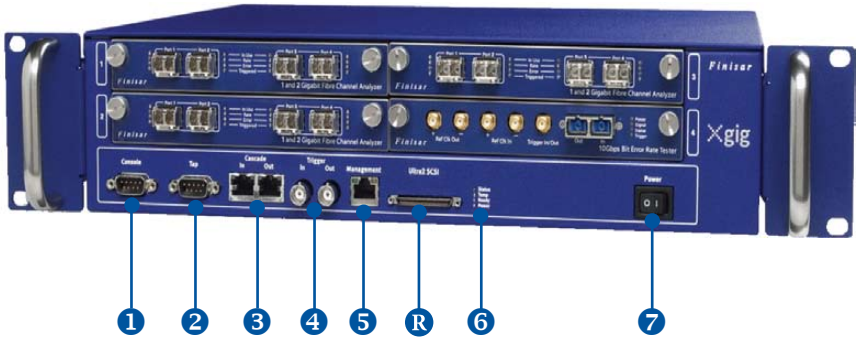
R Reserved

6. System Status LEDs: Ready, Power, Temperature
7. Power on/off Switch
   AC Power Connector (rear—not shown)

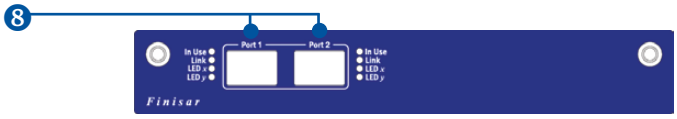
Blades accommodate multiple ports and connector styles, including:

8. SFP connectors and SAS/SATA x1 SFP inserts
9. XFP connectors (10 Gb/s blade only)
10. Wide-Port SAS/SATA connectors

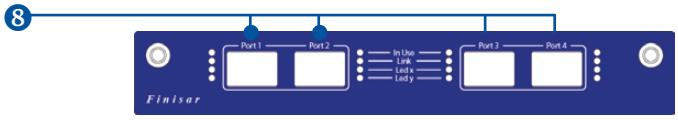
Figure 5: Xgig Chassis and Blade Options



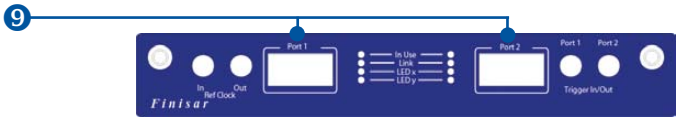
Xgig 4-Slot Chassis



2-Port FC Blade (1.0625, 2.12, 3.0, 4.25 Gb/s)



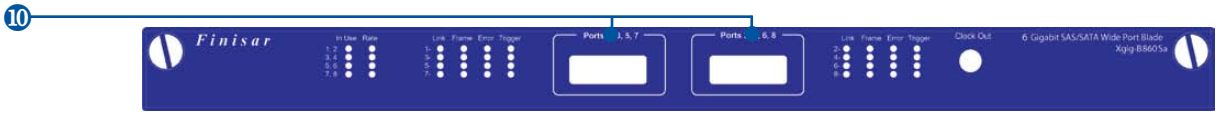
4-Port FC/SAS/SATA Blade (1.0625, 1.5, 2.125, 3.0, 4.25, 6.0, 8.5 Gb/s)



2-Port Ethernet Blade (10 Gb/s)



SAS/SATA Wide-Port/4x Blade (1.5 and 3.0 Gb/s)



SAS/SATA Wide-Port/4x Blade (1.5, 3.0, and 6.0 Gb/s)



1 Gb/s Copper SFP



4 Gb/s Optical SFP



8 or 10 Gb/s SFP+



10 Gb/s XFP



SAS/SATA SFP

XGIG FEATURES:

Industry's only Unified Multi-Protocol, Multi-Functional Platform

Xgig is recognized as the industry's Best-in-Breed network development tool with its unique ability to analyze across multiple protocols with this level of functionality, all on a single platform.

Multi-Protocol Support	Xgig simultaneously supports Fibre Channel, Ethernet (GbE, 10 GbE, FCoE, iSCSI), and SAS/SATA
Comprehensive Multi-Functionality	Each blade supports extensive test functions, including:
Analyzer	Provides extensive visibility into networks as well as the ability to record all traffic between any two end points
Jammer	Inject faults into traffic streams and monitor the efficiency and reliability with which they are handled
BERT	Confirm reliability of physical layer links through low-level testing
Fibre Channel Load Tester	Stress tests systems with sustained traffic bursts to verify network reliability
SAS/SATA Traffic Generator	Comprehensively tests devices at the protocol level

Accelerated Debugging and Simplified Development

Finisar is the industry leader in FC, FCoE, SAS/SATA, and Ethernet development tools and has invested millions in developing tools that make their extensive expertise readily available to all of their customers.

Expert Analysis Software	Finisar is the only company to provide Expert Analysis on monitored links to automatically identify and locate network impairments. Expert checks on more than 1200 symptoms as well as applies more than 1800 metrics to enable developers to resolve pending issues before they result in network shutdown or application slowdown.

Unparalleled Ease-of-Use

The best tools also need to be straightforward and easy to both learn and use. With it's unified platform, Xgig offers the most functionality with extreme ease-of-use.

Intuitive GUI	Spend more time analyzing and less time learning the software interface
Automated Analysis/ Testing	Frunner and API scripting tools facilitate automation of analysis and testing functions
Drag-and-Drop Triggers	Simplify trigger setup with pre-defined protocol-specific templates
Customized Triggers	Template editor enables creation of user-defined protocol templates for triggering
Protocol Development Kit	Develop custom protocol decodes
Calculate Delta Times	Delta calculator determines time delta between any two events, timing properties of user applications, and general performance information
Hardware-Assisted Traffic Summary View	Provides top-level event information in the trace buffer in seconds

Complete Network Visibility and Access to Data

Xgig's extensive capabilities and flexibility provide unmatched visibility into networks to simplify problem identification and resolution, accelerate new product design, and speed time-to-market.

Largest Trace Capture Buffers	With the ability to capture up to 2 GB of traffic per port—up to 16 GB per blade—developers can be sure they have enough trace data to resolve even the most elusive problems
Performance Measurements	Graphic display of useful performance statistics for every active link
Hide Non-Relevant Data	Preset ordered filters hide traffic-control primitives to clear data display clutter so developers can focus on specific frames or packets
Adjustable Payload Size	Reduces trace size and enables capture of extra frame-header information by truncating payloads/frames
Drag-and-Drop Filters	Simplify filter setup with pre-defined protocol templates
Customized Filters	Template editor enables creation of user-defined protocol templates for advanced filtering
SCSI Expert View	Simplify trace analysis by collapsing exchanges and associated behavioral information into a single event in the Data Inspector pane
Protocol Tree View	Displays the tree structure of data when it is mapped to the current protocol
Histogram View	Enables users to focus on small areas of a trace, change the appearance and scale of graphs, and show/hide traces
DWORD View	Provides a detailed view for each line of TraceView's Summary View

Flexible Development Platform

With its blade architecture and configurable multi-functional capabilities, Xgig is the most flexible development platform for network tools available today.

Multiple Probing Methods	Xgig supports two flexible probing modes: Digital Retiming and Analog Pass-through
Flexible Internal Trigger	Five trigger modes enable users to capture trace data intelligently: 1) Stop capture with stop button - no trigger; 2) Stop capture after trigger; 3) Arm on arm condition, stop capture after trigger condition when armed; 4) Arm then stop after trigger, rollback on reset condition; 5) Stop when memory full
External Trigger Support	Allows Xgig platform to trigger or be triggered by an external device through two BNC TTL ports
Trace File Support	Correlate traffic within devices [confirm] using traces captured by the Bus Doctor Analyzer and I-Tech PowerFrames and analyzed using TraceView and Expert
Choice of Decode Engine	Choose between Finisar's optimized [confirm] Xgig proprietary decode engine or the Surveyor decode engine

Leverage Test Equipment Investment

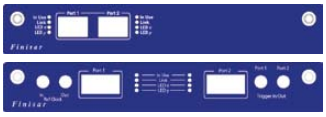
Test equipment is a significant investment for network companies, and Xgig's unified platform enables users to get the most capabilities and performance for their money.

Multi-Function Support	Unified platform dynamically changes blade functionality—Analyzer, Jammer, BERT, SAS/SATA Traffic Generator, Fibre Channel Load Tester—all without changing hardware
Multi-User Capabilities	Supports up to 32 concurrent users
Wide Connectors	Connect to more ports with wide-port/4x SAS/SATA connection and double-wide SAS/SATA blade
Scalable Configuration	Connect up to 4 chassis for unified triggering, capturing, and analysis for comprehensive analysis and visibility across even the most complex networks. Chassis each have one, two, or four slots, and each slot can support two- or four-port blades for coordinated monitoring and time-syncing of up to 64 ports of mixed protocol traffic
Scalable Licensing	Add new tools on-demand through software upgrades

CHASSIS HARDWARE SPECIFICATIONS

MODEL NAME	 *Xgig-C012*	 *Xgig-C022*	 *Xgig-C042*
MECHANICAL	**DIMENSIONS** Height: 2.4 inches (6.1 cm) Width: 11.9 inches (30.2 cm) Depth: 13.4 inches (34 cm) Weight: 5.3 lbs (2.4 kg) (no blades), 6.4 lbs (2.9 kg) (one blade) **INDICATORS** Status Temp Ready Power **CONNECTORS** Cascade Ports: RJ45 (2) Console Port: DB9 Management Port: 10/100/1000 RJ45 Power: Male IEC 320 Receptacle Trigger Out: TTL Trigger In: TTL	**DIMENSIONS** Height: 3.4 inches (8.7 cm) Width: 10 inches (25.4 cm) Depth: 15.2 inches (38.6 cm) Weight: 11.0 lbs (5.0 kg) (no blades), 13.2 lbs (6.0 kg) (two blades) **INDICATORS** Status Temp Ready Power **CONNECTORS** Cascade Ports: RJ45 (2) Console Port: DB9 Management Port: 10/100/1000 RJ45 Power: Male IEC 320 Receptacle Trigger Out: TTL Trigger In: TTL	**DIMENSIONS** Height: 3.4 inches (8.7 cm) Width: 13 inches (38.6 cm) Depth: 12.7 inches (32.3 cm) Weight: 13.5 lbs (6.1 kg) (no blades), 18.0 lbs (8.2 kg) (four blades) **INDICATORS** Status Temp Ready Power **CONNECTORS** Cascade Ports: RJ45 (2) Console Port: DB9 Management Port: 10/100/1000 RJ45 Power: Male IEC 320 Receptacle Trigger Out: TTL Trigger In: TTL
ENVIRONMENT	**TEMPERATURE** Operational: 10 to +40° C (50 to +104° F) Non-operational: -40 to +70° C (-40 to +158° F) **HUMIDITY** Operational: Up to 90% humidity (non-condensing) at +40° C Non-operational: Up to 95% humidity at +65 C. **VIBRATION** Operational: Random Vibration 5-500 Hz, 10 minutes per axis, 2.41g (rms) Non-operational: Random vibration 5-500 Hz, 10 minutes per axis, 0.3 g (rms) Resonant search, 5-500 Hz swept sine, 1 octave/min. sweep rate, 0.75 g, 5 minute resonant dwell at 4 resonances/axis **ELECTROMAGNETIC COMLIANCE** FCC Class A, CE Compatibility **SAFETY** UL		
POWER SPECIFICATIONS	**INPUT VOLTAGE RANGE:** 120/240 VAC, 5.5A **FUSE PROTECTION:** 2.5A 250V **INPUT FREQUENCY:** 50/60 Hz	**INPUT VOLTAGE RANGE:** 120/240 VAC, 3.3A **FUSE PROTECTION:** 4.0A 250V **INPUT FREQUENCY:** 50/60 Hz	**INPUT VOLTAGE RANGE:** 120/240 VAC, 2.0A **FUSE PROTECTION:** 2.5A 250V **INPUT FREQUENCY:** 50/60 Hz
OTHER	**CONTROL SOURCE:** Microsoft Windows PC **MAXIMUM NUMBER OF TIME-SYNC'ED PORTS:** 64 **TIME STAMP RESOLUTION**: 5 nanosecond		

BLADE HARDWARE SPECIFICATIONS

BLADE OPTIONS	 *2 Port Blades*	 *4 Port Blade*	 *1.5 and 3 Gb/s Gigabit SAS/SATA Wide-Port Blade*  *1.5, 3, and 6 Gb/s Gigabit SAS/SATA Wide-Port Blade*
MECHANICAL	**DIMENSIONS** Length: 11.5 inches (292 mm) Width: 6.125 inches (156 mm) Weight: .9 lbs (.5 kg) **INDICATORS (GREEN, YELLOW, OFF)** In Use Link LED x (Application Specific) LED y (Application Specific) **CONNECTORS** 2 SFP or XFP connectors Trigger Out: SMB (10 Gb/s blade only) Trigger In: SMB (10 Gb/s blade only) Reference Clock Out: SMB (10 Gb/s blade only) Reference Clock In: SMB (10 Gb/s blade only)	**DIMENSIONS** Length: 11.5 inches (292 mm) Width: 6.125 inches (156 mm) Weight: .9 lbs (.5 kg) **INDICATORS (GREEN, YELLOW, OFF)** In Use Link LED x (Application Specific) LED y (Application Specific) **CONNECTORS** 4 SFP connectors	**DIMENSIONS** Length: 23 inches (584 mm) Width: 12.25 inches (312 mm) Weight: 2.3 lbs (1 kg) **CONNECTORS** 2 Wide-Port/4x SAS Connectors (3G Wide-Blade) 2 Wide-Port/Mini SAS Connectors (6G Wide-Blade)
PHYSICAL MEMORY BUFFER SIZE	**MAX** 1 GB per port 2 GB per 2 port blade	**MAX** 1 GB per port 4 GB per 4 port blade	**MAX** 2 GB per port 16 GB per Wide-Port blade
PROTOCOL SUPPORT	**SAS/SATA (ANALYSIS, JAMMER)** Supports any SAS (SSP, SMP, STP) topology Supports any SATA topology including via the SAS STP tunneling protocol **FIBRE CHANNEL (ANALYSIS, JAMMER, BERT)** Supports any Fibre Channel topology Supports any Fibre Channel protocol Specialized features for Fibre Channel/SCSI **GIGABIT ETHERNET (ANALYSIS, JAMMER, BERT)** Supports any Gigabit Ethernet topology Supports any Gigabit Ethernet protocol or sub-protocol (ARP, DNS, NFS, IP, TCP, etc.) Analyzes iSCSI, FCIP, and TCP protocols using specialized in-depth features Identifies nearly every "shall" violation in the iSCSI Draft 20 specification Supports iSCSI Draft 8 through Draft 20 Provides MAC Statistics, iSCSI counter Displays link utilization **FCIP (ANALYSIS, JAMMER, BERT)** Supports the FC Over TCP/IP Draft 12 specification (draft-ietf-ips-fcovertcpip-12.txt) Supports the FC Encapsulation Draft 8 specification (draft-ietf-ips-fcencapsulation-08.txt) Gives all relevant FC-4 and FCP-SCSI errors, warnings and metrics for FCIP traces Includes an FCIP topology, detailing location of switch and end-point elements within the FCIP/GigE network framework Creates Expert PDU traces containing re-aligned FCIP PDU headers as well as extended debugging information **USER DEFINED** Supports user defined custom protocol decodes		**SAS/SATA (ANALYZER, JAMMER)** Supports any SAS (SSP, SMP, STP) topology Supports any SATA topology including via the SAS STP tunneling protocol

MINIMUM SYSTEM REQUIREMENTS

- Windows 2000, Windows XP or Windows 2003 operating systems
- Small Configuration (sync group of up to 16 ports)
  Pentium III 800 MHz; 512 MB RAM min; 1 GB preferred, 40 GB min disk space, 100/1000 Mb/s Ethernet
- Large Configuration (sync group of over 16 ports)
  Pentium 4 with 2 GHz or faster processor; 1 GB RAM min; 80 GB disk space; 1000 Mb/s Ethernet

Finisar®

Finisar Corporation
1389 Moffett Park Drive
Sunnyvale, CA 94089
Phone (US Toll Free): 888.746.6484
Phone Intl: 408.400.1000
Email: networktools-sales@finisar.com
www.finisar.com

©2008 Finisar Corporation. All rights reserved. Finisar is a registered trademark of Finisar Corporation. 07/08

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP