

# G2

## NETWORK GUARDIAN G2

NETWORK TESTING



- Platform for network service assurance, performance monitoring and remote testing
- Support for next-generation SONET/SDH network elements and data-centric services
- Scalable, cost-effective distributed architecture
- Small 2U form factor

# Next-Gen Remote Testing

The Network Guardian™ G2 is a cost-effective universal Remote Testing Unit (RTU) for DWDM, SONET/SDH, telecom and datacom network infrastructures. As the industry's smallest and widest-ranging optical performance manager, the Network Guardian G2's 24/7 remote monitoring, performance data collection and dynamic testing features enable tangible operating efficiencies for any service operator's network.

The Network Guardian G2 along with the Visual Guardian™ EMS provides seamless OSS network integration through standard interfaces like CORBA and TL1. When combined with the EXFO Visual Guardian Element Management System (EMS), service operators can provide network-quality service assurance even to the most demanding customer.

The Network Guardian increases your system's operational efficiency by isolating and diagnosing troubled network components before service degradation or outages can occur. It enhances the functionality of existing performance, fault and customer-care applications.



## KEY FEATURES

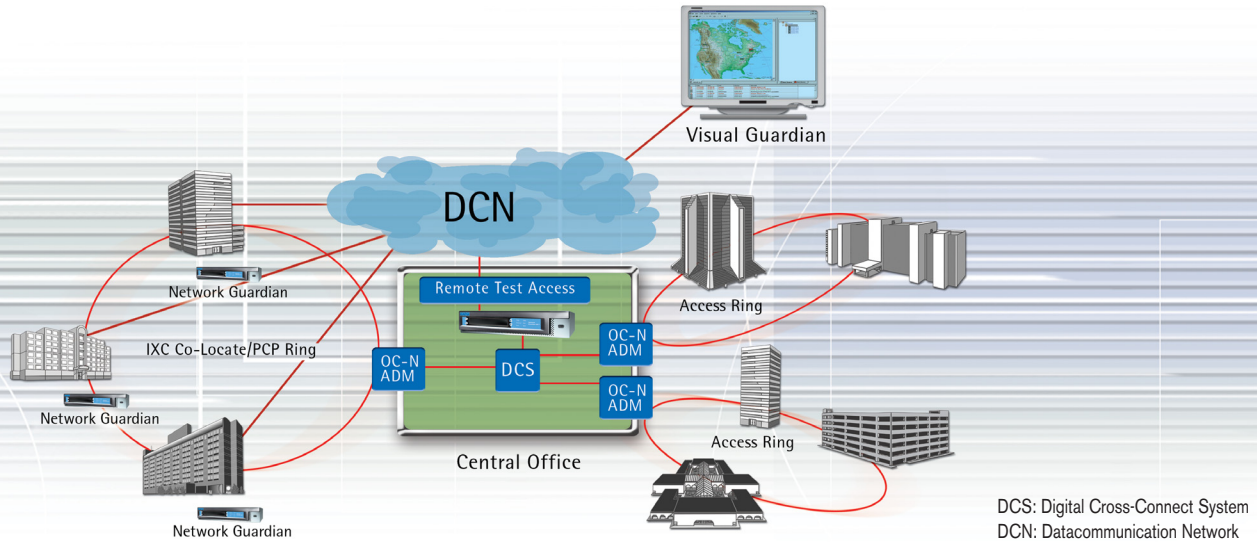
- Universal test platform from DS0/64K to OC-48/STM-16
- Scalable, cost effective and distributed architecture
- Small 2U form factor
- Remote management through secure IP protocols
- Supports integration of TL1 test access devices
- Customizable testing through remote software download and scripting functions
- Performance data collection from digital cross connects, network elements and DWDM systems
- Front panel alarm indicators and LCD for diagnostic and status displays
- User-definable dry contacts
- Local craft port for installation and commissioning

## Ideal for Distributed Testing Environments

- Eliminates single point of failure inherent with centralized systems
- Removes the requirement to backhaul test data through the network
- Allows test access from POPs, handoff points, collocates and critical CPE sites

# Network Guardian G2 Applications

Network Guardian applications include network monitoring, quality assurance, remote testing, manufacturing and R&D.



## Specifications

	SONET	SDH
<b>Test Capabilities</b>	DS0, DS1, VT1.5, DS3, STS-1, 10/100 Mbps and Gigabit Ethernet, OC-3, OC-12 and OC-48 including SONET Overhead Processing	64Kbps, 1.5M, 2M, 34M, 45M, 10/100 Mbps and Gigabit Ethernet, STM-1, STM-4 and STM-16 including SDH Overhead Processing
<b>Telecom Interfaces</b>	<p>Electrical (input and output ports):</p> <ul style="list-style-type: none"> <li>Conformed to Bellcore GR-499 standard: DS1, DS1 (BITS) and DS3</li> <li>Conformed to Bellcore GR-253 standard: STS-1</li> </ul> <p>Optical (input and output ports):</p> <ul style="list-style-type: none"> <li>Conformed to Bellcore GR-253 standard: OC-3, OC-12 and OC-48</li> </ul>	<p>Electrical (input and output ports):</p> <ul style="list-style-type: none"> <li>Conformed to ITU-T G.703 standard: 1.5M/2M, 1.5M/2M (external clock) and 34M/45M</li> </ul> <p>Optical (input and output ports):</p> <ul style="list-style-type: none"> <li>Conformed to ITU-T G.707, G.841, G.957 and G.958 standards: STM-1, STM-4 and STM-16</li> </ul>
<b>Datacom Interfaces (included with Packet Blazer™ option)</b>	<ul style="list-style-type: none"> <li>2x 10/100/1000Base-T (input/output ports)</li> <li>2x 1000Base-SX/-LX (input/output ports)</li> </ul>	<ul style="list-style-type: none"> <li>2x 10/100/1000Base-T (input/output ports)</li> <li>2x 1000Base-SX/-LX (input/output ports)</li> </ul>
<b>Management Ports</b>	<ul style="list-style-type: none"> <li>Serial RS-232C port (DB-9)</li> <li>10Base-T LAN port (RJ-45)</li> </ul>	<ul style="list-style-type: none"> <li>Serial V.24 (RS-232C) port (DB-9)</li> <li>10Base-T LAN port (RJ-45)</li> </ul>
<b>Measurements</b>	<ul style="list-style-type: none"> <li>G.821, G.826, G.828, G.829</li> <li>Electrical and optical signal frequency and power</li> </ul>	<ul style="list-style-type: none"> <li>G.821, G.826, G.828, G.829</li> <li>Electrical and optical signal frequency and power</li> </ul>

## SPECIFICATIONS

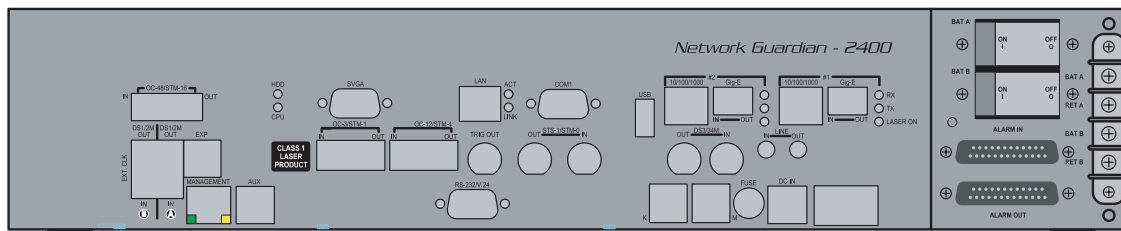
### GENERAL SPECIFICATIONS

Network Guardian G2 Interfaces

- Multiple concurrent users and tests per Network Guardian G2
- Local craft interface and LCD-based menu interface
- Remote, secure IP-based API
- SCPI, TL1, CORBA and LabVIEW™ interface options
- Dry contact I/O with user-defined severities and SNMP traps
- Comprehensive status and alarm indicators

Power -48V, battery A/B, breakers, 110/220 VAC  
 Size (H x W x D) 8.8 cm x 48.26 cm x 30.48 cm (2U x 19 in x 12 in)

### CONNECTOR PANEL



### ORDERING INFORMATION

#### NG-G2-XX-XX-SXX

**Model**

- NG-G2-155-IR = DS0/E0 to OC-3/STM-1
- NG-G2-155-LR = DS0/E0 to OC-3/STM-1
- NG-G2-622-IR = DS0/E0 to OC-12/STM-4
- NG-G2-622-LR = DS0/E0 to OC-12/STM-4
- NG-G2-2400-IR = DS0/E0 to OC-48/STM-16
- NG-G2-2400-LR = DS0/E0 to OC-48/STM-16
- NG-G2-2400-1500 = DS0/E0 to OC-48/STM-16

**Software**

- S01 = SONET
- S02 = SDH
- S03 = SONET/SDH

Example: NG-G2-622-LR-S03

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**Rugged Handheld Solutions**

- OLTS
- Power meter
- Light source
- Talk set



**Optical Fiber**

- OTDR
- OLTS
- ORL meter
- Switch

**DWDM Test Systems**

- OSA
- PMD analyzer
- Chromatic dispersion analyzer
- Multiwavelength meter

**Transport/Datacom**

- 10/100 and Gigabit Ethernet
- SONET/DSn (DS0 to OC-192c)
- SDH/PDH (64 kb/s to STM-64c)
- SAN

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