THE INTELLIGENT TEST SYSTEM

IQS-500

R&D AND MANUFACTURING–OPTICAL

Integrated test solutions for manufacturing, automation, optical qualification and R&D.

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Telecom Test and Measurement

EXFO
EXPERTISE REACHING OUT

Intelligent Test and Measurement for Optical Manufacturers

You've seen the demand for bandwidth rise, and rise again. You were there when DWDM shifted the paradigm. You know the quest for more system power never ends. And you are all too familiar with unforgiving deadlines and shrinking budgets. These are the challenges of today's optical world. Now learn about the solution.

EXFO, the company who introduced the modular concept to the optical test and measurement market, now brings you the next generation of modular optical test systems. Introducing the IQS-500 Intelligent Test System.

Achieve your objectives with this cutting-edge, fully flexible systems-based approach to optical test and measurement (T&M). The IQS-500 combines powerful features such as remote control and can run up to 100 modules. Known for offering the widest range of instruments on the market, EXFO is setting a new standard in T&M modular platforms.

Execute powerful data analysis and high-speed acquisitions with EXFO's IQS Manager software. This user-friendly software operates in the Microsoft Windows® 2000 Professional operating system and efficiently handles all your test and measurement needs.

The IQS-500 Intelligent Test System is a scalable system that includes a modular platform, expansion units, remote control and a comprehensive software environment. This rugged hardware is readily adaptable to the most demanding optical T&M environments. The IQS-500 series is based on standard industrial PC architecture and provides all the connectivity standards and tools required for easy integration into your test environment.

Now, discover the IQS system, the ultimate optical T&M solution. For production, automation or R&D, the IQS-500 has the flexibility and compatibility to meet growing network demands.

IQS PLATFORMS

The IQS-500 Intelligent Test System is based on reliable, standard PC architecture using a reliable industrial motherboard. The IQS-505P and IQS-510P Control Units are the heart of the Intelligent Test System. To meet growing test needs or larger system requirements, successive IQS-510E Expansion Units can be added.

The IQS-500 platforms are backward-compatible with the IQ-200 Optical Test System modules[1].

IQS-505P AND IQS-510P CONTROL UNITS

These core units house a Pentium III processor and offer PC peripherals to fulfill the need for connectivity and remote control, including an Ethernet port and RS-232 port. An optional GPIB interface can also be added. With control of up to nine IQS-510E Expansion Units, you can tailor this configuration to achieve maximum efficiency in your test system.

IQS-505P CONTROL UNIT WITH TOUCHSCREEN

This 5-slot version of the controller offers you an 8.4-inch TFT color touchscreen and useful local controls, including the application scrolling knob.

This unit is ideal for benchtop applications or when you need easy monitoring and/or local control on the production floor.

IQS-510P CONTROL UNIT WITH 10 SLOTS

The IQS-510P is designed for industrial use with 10 module slots. Add an optional 1U rack-mountable screen/keyboard (GP-3005) combo to facilitate operation and save space.

IQS-510E EXPANSION UNIT

Expand your test and measurement system to as many as 100 modules by adding up to nine, 10-slot IQS-510E Expansion Units.

PRECISE TESTING FROM EXFO

For markets and customers in over 70 countries, EXFO provides precisely what the fiber-optic telecommunications industry needs to keep the Internet and high bandwidth growing. We provide industry-leading test, measurement and monitoring instruments to enable our customers to ramp up for speed, bandwidth and automation. With EXFO, you get solutions that are easy to deploy and easy to manage, delivering reliability and repeatability every step of the way.

[1]Some restrictions apply to certain modules. Contact EXFO for more information.

IQS Operating System, Software and Services

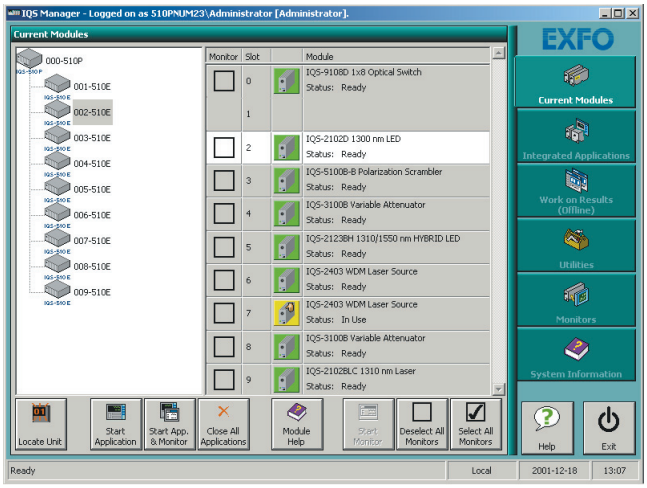
Working under the Windows 2000 Professional operating system, the IQS-500 Intelligent Test System offers you reliability, flexibility and an easy-to-use environment.

Manage your modules, configure your system, launch applications and analyze results, all with IQS Manager. The monitoring tool allows you to view all your instruments at once. Multiple module applications let you control banks of DFB lasers, attenuators and switches.

The Windows 2000 operating system offers you many opportunities, such as handling your data locally with spreadsheet software or running your own applications developed with Visual Basic™, C++, LabVIEW™ or other languages.

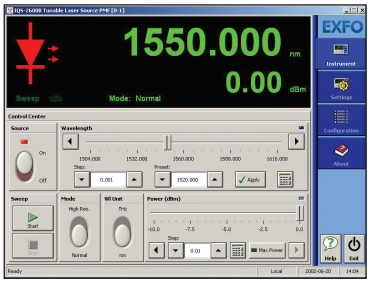
EXFO facilitates the integration of the Intelligent Test System into your testing solution by supplying LabVIEW drivers and ActiveX/COM interfaces. Control your system using local applications or through GPIB,

RS-232 or Ethernet with these tools. EXFO provides all the gear necessary to develop applications to remotely control your instruments over the Ethernet using ActiveX/DCOM technologies.



Your system possibilities are now virtually unlimited.

PROGRESSIVE INTERFACES



IQS TEST MODULES

EXFO offers you by far the widest range of modules on the market. Mix and match modules to build a system that meets any test and measurement challenge.

- IQS-1100 Power Meter
- IQS-1500 Calibration Power Meter
- IQS-1600 High-Speed Power Meter
- IQS-1700 High-Performance Power Meter
- IQS-2100 Light Source
- IQS-2300 ASE Broadband Source
- IQS-2400 WDM Laser Source
- IQS-2600B C+L-Band Tunable Laser Sources
- IQS-2700 ECL Tunable Laser Sources
- IQS-3100 Variable Attenuator
- IQS-3200 Return Loss Meter
- IQS-3400B PDL/OL Meter
- IQS-5100B Polarization Controller
- IQS-5250B Optical Spectrum Analyzer
- IQS-5320 Multi-Wavelength Meter
- IQS-6100 EDFA
- IQS-9100 Optical Switch
- IQS-9600 Utility Modules and Couplers

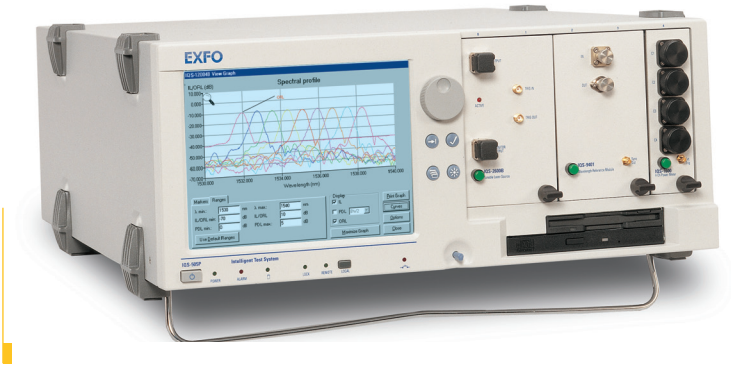
EXFO offers comprehensive IQS-12000 series optical test systems. These powerful, cost-effective units can run as autonomous testing solutions, or be integrated into a larger system. IQS technology provides easy control of these configurations with its user-friendly software.

IQS-12001B CABLE ASSEMBLY TEST SYSTEM

The IQS-12001B Cable Assembly Test System is designed to maximize throughput in the manufacturing environment. Streamline your production testing with mandrel-free insertion loss and high-reflectance measurements on patchcord, multifiber and other interconnect assemblies. Ideal for hard-to-test fanout and hybrid assemblies, the IQS-12001B tests singlemode fibers at 1310 nm/1550 nm or 1550 nm/1625 nm and multimode at 850 nm/1300 nm. It provides on-site calibration verification and a user-friendly touchscreen option, while letting you take advantage of all the features of the IQS-500 Intelligent Test System.

KEY FEATURES

- Mandrel-free reflectance measurements
- High-throughput configuration
- 32 measurement channels (double)
- Rack-mountable
- Remote configuration
- Fully compatible Windows 2000 turnkey software

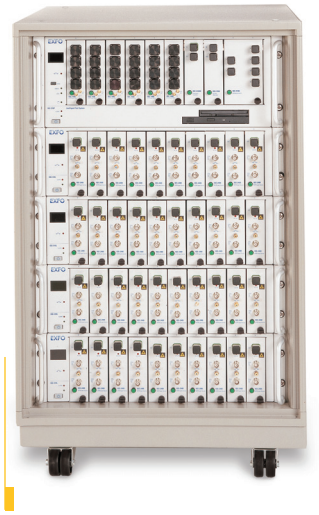


IQS-12004B DWDM PASSIVE COMPONENT TEST SYSTEM

The IQS-12004B provides fast and accurate high-resolution characterization of dense WDM passive components. The system combines a sweeping tunable laser source, multichannel optical power meters, a wavelength reference module and an optional polarization state adjuster.

This testing solution introduces several performance and functional breakthroughs, such as single-pass C+L-band testing, reduced testing time and hands-free PDL measurement. The IQS-12004B quickly, completely and automatically characterizes DWDM passive components for IL, flatness, central wavelength, bandwidth, crosstalk, PDL, ORL and more.

IQS-500 Intelligent Test System



FLEXIBILITY. ENGINEERED.

At EXFO, our engineers strive to offer you the ultimate in flexibility. The IQS-500 Intelligent Test System was designed with that idea in mind. Our team created intelligent solutions for the problem of system growth.

DESKTOP CONFIGURATION

The IQS-505P and IQS-510P control units are ideal for use as high-performance desktop instruments and feature built-in Pentium III processors. Each control unit brings specific advantages to high-performance desktop testing. The IQS-505P comes complete with an 8.4-inch touchscreen for easy operation, while the IQS-510P offers you 10 module slots and works with an external monitor, mouse and keyboard.

HIGH-COUNT SYSTEM CONFIGURATION

Use one IQS-510P Control Unit and up to nine IQS-510E Expansion Units for maximum modularity. You may also use the IQS-505P if local control/display are required. This configuration offers you substantial possibilities in terms of the number and variety of modules that can be integrated into the system.

Integrate up to 100 single-slot modules, such as WDM laser sources or attenuators, into a single system at an affordable price.

In today's world of automation, connectivity and remote control capabilities are critical. The IQS-500 Intelligent Test System can be configured to allow optimal system performance.

GPIB CONFIGURATIONS

Via the optional GPIB, use the IQS-505P and/or the IQS-510P either as a slave or master instrument in your network.

Use the GPIB slave configuration to integrate the IQS-500 Intelligent Test System with your existing GPIB network. One GPIB address enables you to control up to 100 modules. The IQS offers the fastest GPIB interface available on the market–processing up to 100 commands per second.

Putting a new lab together? Want to get the most out of your instruments, especially the IQS-500? Why not use the IQS-500 to control your GPIB network? The unique PC-based architecture and Windows 2000 Professional operating system provide all the latitude you need to do so. Run any of your applications developed with C++, Visual Basic, LabVIEW, or others, directly on the Intelligent Test System.

GPIB configurations are in conformity with the IEEE-488 standards.

Remote Control: A World of Possibilities

ETHERNET

Now EXFO gives you all the tools you need to develop a test solution using Ethernet. The standard Ethernet connection allows you to connect to your LAN using DCOM objects for all your programming applications.

RS-232 CONFIGURATION

If you need to control a single instrument or a IQS-500, opt for the simplicity of the RS-232 configuration.

THE POWER IS IN YOUR HANDS WITH IQS CONTROLLERS

- Industrial motherboard Pentium III processor
- 10/100Base-T Ethernet for remote control or LAN connection
- Up to 512 MB SDRAM
- Two USB ports
- Internal 3.5-inch, 1.44 MB floppy drive
- Internal CD-ROM for easy software upgrades and optional CD-RW available
- Serial and parallel ports
- External monitor, keyboard and mouse ports
- 19-inch rack-mountable
- Windows 2000 Professional operating system
- IQS Manager Software
- ActiveX (COM/DCOM) Interfaces, SCPI commands and LabVIEW drivers

Specific to the IQS-505P

- 8.4-inch touchscreen display
- Easy-to-use, application scrolling knob
- Dedicated function buttons

Specifications

IQS-505P AND IQS-510P

CPU	Industrial Pentium III, 866 MHz, 256 MB memory (512 optional)	
Display (IQS-505P only)	8.4-in touchscreen, 800x600 color TFT	
Interfaces	10/100 Base-T Ethernet	2 USB ports
	Serial RS-232	External keyboard/mouse
	Parallel port	EXFO bus II output
	External monitor port	
Storage	Internal 40 GB hard drive (minimum)	
	Internal 3.5 in, 1.44 MB floppy drive	
	Internal CD-ROM (CD-RW optional)	
Power	110-120/210-240 VAC, 50/60 Hz	
Dimensions (IQS-510P)	177 mm x 439 mm x 495 mm	(7 in x 17 $^{1}/_{4}$ in x 19 $^{1}/_{2}$ in)
Weight (IQS-510P)	16.6 kg	(36.7 lb)
Dimensions (IQS-505P)	177 mm x 439 mm x 495 mm	(7 in x 17 $^{1}/_{4}$ in x 19 $^{1}/_{2}$ in)
Weight (IQS-505P)	16.5 kg	(36.3 lb)
Temperature		
Operating	0 °C to 40 °C	(32 °F to 104 °F)
Storage	–40 °C to 70 °C	(–40 °F to 158 °F)
Relative humidity	0 % to 80 % non-condensing at 40 °C	

IQS-510E

Interface	EXFO bus II input/output	
Power	110-120/210-240 VAC, 50/60 Hz	
Dimensions	133 mm x 439 mm x 495 mm	(5 $^{1}/_{4}$ in x 17 $^{1}/_{4}$ in x 19 $^{1}/_{2}$ in)
Weight	12.8 kg	(28.3 lb)
Temperature		
Operating	0 °C to 40 °C	(32 °F to 104 °F)
Storage	–40 °C to 70 °C	(–40 °F to 158 °F)
Relative humidity	0 % to 80 % non-condensing at 40 °C	

Software and Drivers

Operating System	Windows 2000 Professional
EXFO Software	IQS Manager
Local control	ActiveX/COM library using SCPI commands[a] LabVIEW drivers using ActiveX/COM library

Remote control

Ethernet	ActiveX/DCOM library using SCPI commands[a] or LabVIEW drivers using ActiveX/DCOM
GPIB	SCPI commands or LabVIEW drivers
RS-232	SCPI commands or LabVIEW dirvers

Note:

a. Compatible with Microsoft.NET "T&M Programmers' Tool Kit".

ORDERING INFORMATION

MODULE

IQS-505P-NXX-XX-GX
IQS-510P-NXX-XX-GX

Memory
N10 = Standard 256 MB
N12 = Additionnal 256 MB (total of 512 MB)

GPIB Card
00 = No GPIB card requested
I3 = GPIB card

CD
G1 = CD-ROM
G2 = CD-WRITER

Example: IQS-505P-N10-I3-G1
Example: IQS-510P-N10-I3-G1

IQS-510E-EX

EXFO Bus Cable
E0 = 0.3 m (1 ft)
E3 = 0.8 m (2.5 ft)
E4 = 1.5 m (5 ft)

Example: IQS-510E-E3

ACCESSORIES

GP-130 = GPIB cable (2 m/6 ft)
GP-215 = PS/2 keyboard
GP-3000 = Carrying case for one IQS-500 platform
GP-3001 = Carrying case for 10 IQS modules
GP-3002 = PS/2 mouse
GP-3003 = GPIB Master/Slave card
GP-3004 = QS blank plate
GP-3005 = LCD/keyboard/mouse 1U/drawer
GP-3006 = Back control panel for IQS-510P
GP-3007 = Back control panel for IQS-510E
GP-3008 (A-E-I-S-U) = 17-in video monitor
GP-3013 = Rackmounting brackets for IQS-510P and IQS-505P
GP-3014 = Rackmounting brackets for IQS-510E

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