BLACK BOX®
NETWORK SERVICES

CERTIFIBRE™

Key Features

- ***One-button multimode-fibre certification takes 75% less time than using a manual power meter.***
- ***Simultaneously measures loss at both 850 and 1300 nm without requiring you to change connectors.***
- ***Measures fibre length and propagation delay and calculates optical link budgets.***
- ***Performs a pass/fail analysis complete with headroom numbers.***
- ***Store up to a thousand test results in nonvolatile memory.***
- ***Use included serial cable and ScanLink software to download and print stored results.***

NOTE: CertiFibre can not be used to test or certify single-mode cable.

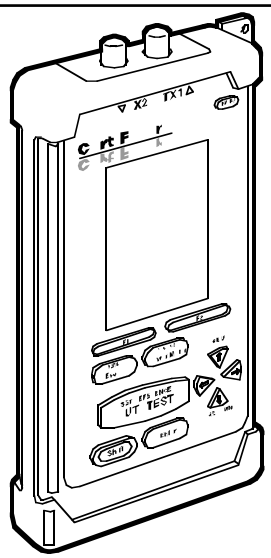
Testing and certifying fibreoptic cables can often seem like the ultimate exercise in monotony and tedium: Calculate. Configure. Plug in. Punch in the commands to do Test A. Calculate again. No, that can't be right—start over. Switch to different modules for the other wavelength. Enter more commands to do Tests B, C, and D. Calculate some more. Write down the results in a legal pad. Repeat endlessly.

If you've been looking for a better way, try the CertiFibre™. It automates the testing process, yielding more reliable results more quickly and simply than other methods.

For one thing, it reduces the testing process to a single push of a button. Once you've selected a standard to test against, just attach one end of the multimode cable being tested to the CertiFibre main unit, and the other end to the included CertiFibre Remote, then press AUTOTEST and input the number of splices and connectors involved.

In seconds, CertiFibre automatically measures length, propagation delay, and dual fibre loss for both 850 and 1300 nm—no need to change units or connectors. It also calculates the optical link budget for you, then reports all of the above along with an overall pass/fail analysis.

(If the cable passes, CertiFibre also tells you how much "headroom" you have—that is, how much safety margin there is above the limits of the standard, so you can be confident that your cables will continue to perform even if your system degrades over time.)



Press a single button to certify that multimode fibreoptic cables perform—or fail to perform—to any of a variety of industry standards.

Perhaps even more importantly, CertiFibre can store the time- and date-stamped, alpha-numerically named results of as many as 1000 tests in its nonvolatile memory. And with the included serial cable and ScanLink® software, you can download these results to a PC and print out professional certification reports for your customers!

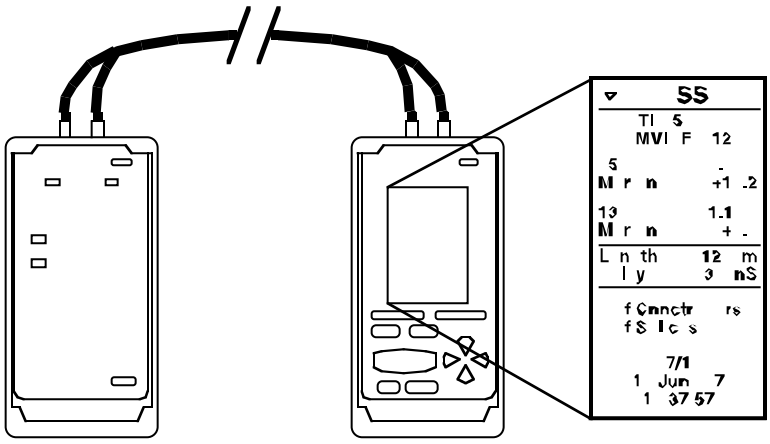
CertiFibre can certify your cables for the general TIA-568A and ISO 11801 specifications, as well as for applications such as 10- and 100-Mbps Ethernet, ATM, FDDI, Fibre Channel, and Token Ring.

Typical Applications

Inspect your terminated multimode cables as they come off the truck or the assembly line. Send the results of your tests to a PC, print them out, and pack the printout with the cable for sending on (if they pass) or sending back (if they fail).

Your company is thinking of upgrading to Fast Ethernet or ATM, but you're not sure if your installed base of multimode cabling can handle it. CertiFibre can tell you what's ready and what isn't.

Not only does CertiFibre display lots of information about each test, but you can save the results of hundreds of tests and even port those results to a PC for later analysis!



These results show that the fibre being tested passes TIA-568A certification. The display shows: the user-defined test name; attenuation loss at 850 and 1300 nm; margin above the standard; fibre length; propagation delay; number of connectors; number of splices; and the date and time of the test.

Specifications

Compliance: CE

Interfaces:
Fibreoptic: Multimode only;
Serial: TIA-574 (DB9) subset of TIA RS-232, DCE

Standards Autotested Against:
TIA-568A, ISO 11801, ATM155, ATM155SWL, ATM622, 10BASE-F, 100BASE-F, 100BASE-SX, 100BASE-LX, FDDI, Fibre Channel, Token Ring, or user-defined

Autotest Results Reported: 850- and 1300-nm loss, pass/fail margin, and optical link budget; length; propagation delay; and overall pass/fail analysis, all for each of the two attached fibres

Wavelengths: 850 and 1300 nm

Transmit Level: Greater than –20 dBm for both 850 and 1300 nm

Dynamic Range:
Loss: +3 to –55 dBm;
Length: 1 to 2000 m (3 to 6562 ft.);
Propagation delay: 10 to 10,000 ns

Resolution:
Power/Loss: 0.01 dB/dBm;
Length: 1 m or 1 ft.;
Propagation delay: 1 ns

Accuracy/Linearity: ±0.25 dBm

Optical Link Budget: Automatically calculated based on measured length, number of mated connections, number of splices, and user-selected standard to be tested against

Internal Memory: Nonvolatile flash RAM for storing autotest results for as many as 1000 fibres

User Controls: ScanLink PC software (on included 3.5" PC-format diskette);
Main unit: (12) Pushbuttons for power and test options;
Remote: (2) Pushbuttons for power and battery test

Indicators:
Main unit: (1) 640-x-128-pixel graphical LCD;
Remote: (4) LEDs for pass/fail and wavelength

Connectors:
Fibreoptic: (2) ST female with indium gallium arsenide (InGaAs) photodiodes;
Serial: (1) DB9 female

Leads Supported: DB9: All

Power: (3) AA batteries (incl.)

Temperature Tolerance:
Operating: 0 to 45˚C (32 to 113˚F);
Storage: - 20 to 60˚C (- 4 to 140˚F)

Humidity Tolerance:
Operating: 5 to 90% noncond.;
Storage: 5 to 95% noncond.

Size: 18H x 7.9W x 4D cm (7.1"H x 3.1"W x 1.6"D)

Weight: Main unit: 422 g (14.9 oz.,0.9 lb., 0.4 kg);
Remote: 380 g (13.4 oz., 0.8 lb., 0.4 kg)

The complete package

- The CertiFibre main unit.
- The CertiFibre Remote.
- (1) 3.5" diskette with ScanLink software.
- (6) AA alkaline batteries.
- (1) 3-ft. (0.9-m) straight-through-pinned DB9 male to DB9 female serial cable.
- (1) Users' manual.
- (1) Carrying case.

Additional equipment you might need

- SC-to-ST adapters or adapter cable.
- SMA-to-ST adapters or adapter cable.
- FDDI-to-ST adapters or adapter cable.
- Fibreoptic patch cable.

Ordering Information

ITEM	CODE
CertiFibre™	TS655A
OPTIONAL ACCESSORIES	
ST-to-SC Adapters:	
Duplex	FO209
Simplex	FO201
Terminated Fibreoptic Cable, Duplex, Riser, 1 m (3.2 ft.):	
ST to ST	EFN062-001M-CC
SC to ST	EFN4010-001M
Terminated Fibreoptic Cable, Duplex, Riser, specify length:	
SMA 905 to ST	EFN062-CM
SMA 906 to ST	EFN062-BC
FDDI-to-ST Adapter Cable:	
OFNR Riser, 1 m (3.2 ft.)	EFN4003-001M