

Specifications

Electrical Characteristics

The following characteristics and features apply to the FiberMaster OTDR mainframe after a warmup period of at least 15 minutes. All loss numbers reflect one-way measurements unless otherwise specified.

Display Range—Vertical System

Vertical range	1 dB to 50 dB
Loss measurements Loss readout resolution	0.001 dB to 0.01 dB

Display Range—Horizontal System

Distance range	1 m to 200 km
Distance measurements Cursor resolution (min)	
850 nm MM	5 cm, normal density; 1 cm, high density
1300 nm MM/ 1310 nm SM/ 1550 nm SM	20 cm, normal density; 10 cm, high density
Index of refraction range	1.4000 to 1.6000
Distance measurement accuracy	$\pm 0.001\%$, \pm minimum cursor resolution \pm uncertainty in index of refraction
Number of stored waveform points	16,000 maximum (normal density) 32,000 maximum (high density)

Display

Size	6.5 inches (16.5 cm) diagonal
Resolution	640 by 480 pixels
Display type Color Monochrome	Two-color liquid-crystal shutter Green

Keyboard

Connector	5-pin RJ11
Compatibility	IBM AT compatible (input only)

Hardcopy

Internal printer Resolution Print dimensions	High-speed, high-resolution dot matrix, thermal 150 dots/in vertical and horizontal (640 by 480 pixels) 4 in by 5 in (10.2 cm by 12.7 cm)
External plotter	HP-GL compatible (Tektronix HC100): GPIB and RS232 connections
External printer	Epson FX-compatible (Tektronix HC200): RS232 connection Hewlett-Packard ThinkJet-compatible: GPIB and RS232 connections PostScript-compatible: RS232 connection

Mass Storage

Floppy disk drive Size Capacity Format	3.5 in (8.9 cm) 1.44 Mbyte or 720 Kbyte MS-DOS compatible
Internal RAM Capacity	1 Mbyte

Operational Characteristics

Power requirements AC operation	90 - 130 VAC or 180 - 260 VAC, 47 - 440 Hz (auto select)
Power supply rating Maximum input power Maximum output power	240 watts 225 watts
Module capacity	Two dual-wavelength modules maximum, for a total of four wavelengths

Physical Characteristics

Weight	33 lbs (15 kg), mainframe configured with floppy-disk drive, internal printer, and one optical module
Dimensions	Overall dimensions, including front cover, handle, and feet: Length, 23.9 in (60.7 cm); width, 17.8 in (45.2 cm); height, 7.8 in (19.8 cm)

Environmental Characteristics

Temperature Mainframe	Operating: -10 to +55 degrees C Non-operating: -40 to +70 degrees C
With internal printer and/or floppy disk drive	Operating: +5 to +40 degrees C Non-operating: -20 to +60 degrees C
Humidity Mainframe	90% (+5%, -0%) noncondensing
With internal printer and/or floppy disk drive	35% to 85% noncondensing
Altitude Operating	15,000 ft (4,572 m)
Non-operating	40,000 ft (12,192 m)
Vibration	Frequency swept from 5 to 55 Hz for 25 minutes with 5-minute dwell at 55 Hz in each of four axes, producing peak-to-peak displacement of 0.025 inches
Shock (non-operating)	30 g
Bench handling	4 inches topple, or 45 degrees, or point of balance
Transit drop	8 inches, 14 drops
Water resistance	Drip proof with front cover on
Fungus resistance	Materials used are fungus inert
Salt exposure	48 hours
Electromagnetic compatibility	Within limits described in FCC-15J/A and VDE0871B
Package transit vibration	Tektronix standard 062-2858-00, paragraph 9.1
Package drop	Tektronix standard 062-2858-00, paragraph 9.2
Electrostatic discharge	Tektronix standard 062-2862-00

Physical Characteristics

Dimensions	cm	in.
Length	60.7	23.9
Width	45.2	17.8
Height	19.8	7.8
Weight	kg	lb.
Net	15.0	33.0 (Typical)

Plug-in Optics Module Characteristics

FM8513 - Multimode

Wavelengths - 850 / 1300 nm.

Fiber size - 62.5 μ m.

Dynamic range - 26.5 dB / 26 dB.

Event dead zone - 0.2 / 3 m.

Loss dead zone - 2.5 / 14 m.

FS1315 - High Resolution SM

Wavelengths - 1310 / 1550nm.

Fiber size - Singlemode.

Dynamic range - 29.5 / 26.5 dB.

Event dead zone - 3 / 3 m.

Loss dead zone - 15 / 18 m.

FG1315 - General Purpose SM

Wavelengths - 1310 / 1550nm.

Fiber size - Singlemode.

Dynamic range - 31 / 29 dB.

Event dead zone - 4 / 4 m.

Loss dead zone - 25 / 30 m.

FL1315 Long Range SM

Wavelengths - 1310 / 1550nm.

Fiber size - Singlemode.

Dynamic range - 37.5 / 37 dB.

Event dead zone - 25 / 25 m.

Loss dead zone - 125 / 170 m.

