

DFS1 Digital FiberScope



Features

- One-handed ergonomic design
- 400x magnification
- Fast, easy focus and display capture
- Video output via USB port to user PC
- Powered from USB; no batteries required
- Extensive selection of adapter tips

Applications

- Optical connector and bulkhead adapter inspection
- Generate installation inspection records

The DFS1 Digital FiberScope provides magnified video inspection of optical fiber connector end-faces. The ergonomically designed hand-held unit illuminates fiber end-faces and displays magnified images via USB port to a PC running AFL SimpleView Fiber inspection software, or to legacy AFL M-series OTDRs, C-series OTDRs and Certification Testers. SimpleView software displays, labels and stores captured images as part of connector installation and/or maintenance records on the user's PC.

Easy to use: A large adjustment knob provides easy focusing using real-time view. Once focused, a conveniently located trigger button signals the attached display device to capture the image for analysis and archiving. The scope's ergonomic shape and control locations support comfortable, single-handed operation.

No Batteries: The DFS1 is powered through the USB port, eliminating the need for an additional battery or AC power supplies.

Safe for eyes: Electronic video inspection eliminates all danger of eye damage from active (lit) fibers carrying either visible or infrared wavelengths.

Versatile: An extensive assortment of adapters supports inspection of a wide range of optical jumper cable connector ferrules and bulkhead adapters. Bulkhead adapter tips are available in multiple lengths as well as 60° angle. Connector adapters are available for PC, UPC or APC polished ferrules in 1.25 mm, 2.5 mm and other diameters. The DFS1 is available in three different kits which provide either PC/ UPC adapters, APC adapters or no adapters.

Includes free software: AFL SimpleView™ Fiber Inspection Software is an application, which permits the DFS1 Digital FiberScope to be used with Windows® computers. AFL SimpleView software displays a live, high-resolution video image of the end-face of an optical fiber on the PC's display. SimpleView software is a free download www.AFLglobal.com.

DFS1 Digital FiberScope

Specifications ^a

VALUE	PARAMETERS
Magnification	400X
Field of View	~400 μm x 300 μm
Resolution	0.5 μm detectable
Operating Temperature	0°C to 50°C
Storage Temperature	-20°C to 70°C
Focus	Manual adjustment, 2 mm max travel
Dimensions	35 mm diameter x 175 mm length (without tip)
Weight	200 g
Light Source	Blue LED
Power Supply	USB port of M-series OTDRs or C-series OTDRs and Certification Testers

Note:

a. All specifications valid at 23°C ±2°C (73.4°F ±3.6°F) unless otherwise specified.

Ordering Information

The DFS1 is available in three different kits, which provide PC/UPC adapters, APC adapters, or no adapters. Each DFS1 kit includes: DFS1 Digital FiberScope, 6-compartment adapter tips storage box, FiberScope software update for M series OTDRs, quick reference guide and soft carry case.

AFL NO.	DESCRIPTION	CONTAINS (EA.)										
		DFS1	ONE-CLICK CLEANERS		ADAPTER TIPS							
					MALE				FEMALE			
					PC		APC		PC		APC	
SC, ST, FC	MU/LC	2.5 MM	1.25 MM	2.5 MM	SC, FC	LC	SC, FC	SC				
DFS-00-04XU	DFS1 PC/UPC Kit	1	1	1	1	1			1	1		
DFS-00-04XA	DFS1 APC Kit	1	1					1			1	1
DFS-00-04XN	DFS1 kit without adapters	1										

DFS1 Accessories

DESCRIPTION	AFL NO.
Soft carry case for DFS1 Digital FiberScope and adapters	DFS1-04-0001MZ
6-compartment adapter tip storage box	1400-01-0093MZ
11-compartment adapter tip storage box	1400-01-0094MZ
Digital FiberScope display software update for M series OTDR	DFS1-001-00
One-Click Cleaner SC, ST, FC	8500-05-0001MZ
One-Click Cleaner MU/LC	8500-05-0002MZ
2-year Service Plan for DFS1 kits - Includes free repair or replace, if your DFS1 kit is found defective.	SP2-DFS1-04X

DFS1 Digital FiberScope

DFS1 Adapter Tips

The following table identifies commonly required adapter tips. Please consult the factory for additional adapter tips and prices.

DESCRIPTION	AFL NO.
PC FERRULE CONNECTOR ADAPTER TIPS	
Universal 1.25 mm tip for PC ferrule connector	DFS1-00-0001MR
Universal 2.5 mm tip for PC ferrule connector	DFS1-00-0002MR
Universal 2.0 mm tip for PC ferrule connector	DFS1-00-0005MR
Slim 1.6 mm tip for PC ferrule (termini)	DFS1-00-0006MR
Slim 1.25 mm probe tip for LuxCis and termini	DFS1-00-0038MR
Slim 2.5 mm PC ferrule tip for ELIO and termini	DFS1-00-0039MR
Tip for ELIO 1.25 mm ferrule connector	DFS1-00-0008MR
SC/PC AND FC/PC BULKHEAD ADAPTER TIPS	
Tip for SC/PC and FC/PC bulkhead adapter	DFS1-00-0003MR
Medium extended tip for SC/PC and FC/PC bulkhead adapter	DFS1-00-0011MR
Long extended tip for SC/PC and FC/PC bulkhead adapter	DFS1-00-0012MR
60° angled tip for SC/PC bulkhead adapter	DFS1-00-0040MR
ST/PC BULKHEAD ADAPTER TIPS	
Tip for ST/PC bulkhead adapter	DFS1-00-0014MR
Short extended tip for ST/PC bulkhead adapter	DFS1-00-0015MR
Medium extended tip for ST/PC bulkhead adapter	DFS1-00-0016MR
Long extended tip for ST/PC bulkhead adapter	DFS1-00-0017MR
60° angled tip for ST/PC bulkhead adapter	DFS1-00-0018MR
LC/PC BULKHEAD ADAPTER TIPS	
Tip for LC/PC bulkhead adapter	DFS1-00-0004MR
Medium extended tip for LC/PC bulkhead adapter	DFS1-00-0020MR
Long extended tip for LC/PC bulkhead adapter	DFS1-00-0021MR
60° angled tip for LC/PC bulkhead adapter	DFS1-00-0022MR
Short (~60 mm) extended tip for LC PC/UPC bulkhead adapter	DFS1-00-0059MR
LC/UPC female style adapter tip	DFS1-00-0062MR
MU/PC BULKHEAD ADAPTER TIPS	
Tip for MU/PC bulkhead adapter	DFS1-00-0026MR
Long extended tip for E2000/PC bulkhead adapter	DFS1-00-0025MR
MTPMPO MULTI-FIBER ADAPTER TIPS (FERRULE & BULKHEAD)	
Multi-row base for MTP/PC ferrule and bulkhead adapter extended tip	DFS1-00-0060MR
MPO/MTP Adapter Tips	
Adapter tip for MPO-12 PC bulkhead; Requires single- or multi-row base	DFS1-00-0041MR
Adapter tip for MPO16 PC bulkhead; Requires single- or multi-row base	DFS1-00-0058MR
Adapter tip for MPO-12 PC connector ferrule; Requires single- or multi-row base	DFS1-00-0061MR
Adapter tip for MPO-12 APC bulkhead; Requires single- or multi-row base	DFS1-01-0012MR
Adapter tip for MPO-16 APC bulkhead; Requires single- or multi-row base	DFS1-01-0015MR
Adapter tip for MPO-12 APC connector ferrule; Requires single- or multi-row base	DFS1-01-0017MR
MPO/MTP Adapter Kits - include Base plus Adapter Tip(s)	
Single-row base plus extended MPO-12 PC bulkhead adapter tip	DFS1-00-0037MR
Single-row base plus MTP plus MTPA (MPO-12 PC and MPO-12 APC) bulkhead adapter tips	DFS1-00-0042MR
Multi-row base plus MTP (MPO-12 PC) bulkhead adapter tip	DFS1-00-0050MR
Single-row base plus MTPA (MPO-12 APC) bulkhead adapter tip	DFS1-01-0010MR
MISCELLANEOUS PC BULKHEAD ADAPTER TIPS	
Universal 60 degrees angled extended adapter tip	DFS1-00-0056MR
LEMO 2.0 mm bulkhead	DFS1-00-0031MR

DFS1 Digital FiberScope

DFS1 Adapter Tips

DESCRIPTION	AFL NO.
2.0 mm termini bulkhead	DFS1-00-0033MR
1.6 mm termini bulkhead	DFS1-00-0034MR
ELIO 1.25 mm bulkhead	DFS1-00-0036MR
SMA 905 bulkhead	DFS1-00-0046MR
TFOCA II ferrule and bulkhead adapter guide only	DFS1-00-0048MR
TFOCA II ferrule and bulkhead adapter tip only	DFS1-00-0049MR
Adapter for Viavi/Westover tips, for DFS1 and FOCIS Flex inspection probe	DFS1-00-0057MR
APC TIPS	
Universal 1.25 mm tip for APC ferrule connector	DFS1-01-0001MR
Universal 2.5 mm tip for APC ferrule connector	DFS1-01-0002MR
Tip for SC/APC and FC/APC bulkhead adapter	DFS1-01-0003MR
Tip for SC/APC bulkhead adapter	DFS1-01-0011MR
Tip for LC/APC bulkhead adapter	DFS1-01-0004MR
Short extended tip for SC/APC bulkhead adapter	DFS1-01-0005MR
60° angled tip for SC/APC bulkhead adapter	DFS1-01-0006MR
SC/APC (OptiTap®) bulkhead	DFS1-01-0007MR
Tip for LX.5/APC bulkhead adapter	DFS1-01-0009MR
Single-row base with OptiTip® APC bulkhead and connector ferrule adapter tips	DFS1-01-0013MR
Short (~60 mm) extended tip for LC/APC bulkhead	DFS1-01-0014MR
LC/APC female style	DFS1-01-0016MR

Qualifications

CATEGORY	REGULATION/STANDARD	QUALIFICATION
CE Marking	EU	Compliant to relevant EU Directives on health, safety, and environmental protection, and certified with CE marking
Safety /EMC /EMI	IEC	Compliant to IEC 61010-1 for safety requirements for electrical equipment
	EN	Compliant to EN 61010-1 for safety requirements for electrical equipment
	IEC	Compliant to IEC 61326-1 for EMC requirements for electrical equipment
	EN	Compliant to EN 61326-1 for EMC requirements for electrical equipment
	EN	Compliant to EN 55011 for EMC requirements for industrial, scientific and medical equipment
	FCC	Compliant to code of federal regulations FCC 47 CFR 15 on unlicensed transmissions
RoHS	EU	Compliant to EU regulations Directive 2011/65/EU (RoHS 2) and Directive 2015/863 (RoHS 3)

Contact Sales@AFLglobal.com to schedule a demonstration or learn how to buy.

International Sales and Service Contact Information available at www.AFLglobal.com/Test/Contacts