

October 15, 2016

Fiber Optic Connector Inspection

FOCIS Flex Fiber Optic Connector Inspection System



FOCIS Flex

FOCIS Flex is the world's smallest, fastest, self-contained fiber connector inspection probe. Its innovative, ultrafast auto-focusing system auto-centers, captures and analyzes the optical fiber end-face, displaying "Pass/Fail" results on the built-in screen in one push of a button. Results can be transferred wirelessly to smart devices or FlexTester OTDRs. The FOCIS Flex offers built-in pass/fail analysis to IEC 61300-3-35, IPC or user set criteria. The device can also be used for OptiTap and MTP/MPO inspections with AFL adapters.

All FOCIS Flex kits include TRM® 2.0, Test Results Manager software to prepare and print or save connector inspection reports using results uploaded from the FOCIS Flex to a PC.

FOCIS Flex Connector Inspection Kits

AFL NO.	Description
FOCIS-FLX-P4XN	FOCIS Flex, soft carry case/holster, AC charger, wrist strap, no tips, TRM 2.0 Basic
FOCIS-FLX-P4XU	FOCIS Flex, soft case/holster, AC charger, wrist strap, UPC bulkhead and UPC ferrule tips (1 ea), One-Click cleaner, TRM 2.0 Basic
FOCIS-FLX-P4XA	FOCIS Flex, soft case/holster, AC charger, wrist strap, APC bulkhead and APC ferrule tips (1 ea), One-Click cleaner, TRM 2.0 Basic



FOCIS Flex with FlexTester OTDR

FOCIS Flex Order Entry

FOCIS-FLX-P4X **K** — **PLUG** — **TIP**

Example: FOCIS-FLX-P4XA-US-ASC indicates a FOCIS Flex with the domestic AC plug and 2.5 mm APC ferrule adapter, SC-APC bulkhead adapter & 2.5 mm One-Click Cleaner.



FOCIS Flex with Smart Device

K	Kit Type
N	No adapter tips
U	UPC adapter tips
A	APC adapter tips

PLUG	Country-specific AC power plug
US	United States
UK	United Kingdom
EU	European Union
CN	China, Australia

TIP	User-selected adapter tips and One-Click cleaner
FOCIS-FLX-P4XN Kits	
Blank	No adapter tips and One-Click cleaner
FOCIS-FLX-P4XU Kits	
SC	2.5 mm UPC ferrule adapter, SC-UPC bulkhead adapter, 2.5 mm One-Click
FC	2.5 mm UPC ferrule adapter, FC-UPC bulkhead adapter, 2.5 mm One-Click
ST	2.5 mm UPC ferrule adapter, ST-UPC bulkhead adapter, 2.5 mm One-Click
LC	1.25 mm UPC ferrule adapter, LC-UPC bulkhead adapter, 1.25 mm One-Click
FOCIS-FLX-P4XA Kits	
ASC	2.5 mm APC ferrule adapter, SC-APC bulkhead adapter, 2.5 mm One-Click
AFC	2.5 mm APC ferrule adapter, FC-APC bulkhead adapter, 2.5 mm One-Click
ALC	1.25 mm APC ferrule adapter, LC-APC bulkhead adapter, 1.25 mm One-Click

FOCIS Flex Connector Inspection Adapter Tips

AFL NO.	Description
FFLX-01-SC	SC-UPC bulkhead adapter tip
FFLX-01-FC	FC-UPC bulkhead adapter tip
FFLX-01-ST	ST-UPC bulkhead adapter tip
FFLX-01-LC	LC-UPC bulkhead adapter tip
FFLX-01-U25	Universal 2.5 mm, UPC ferrule adapter tip
FFLX-01-U125	Universal 1.25 mm, UPC ferrule adapter tip
FFLX-01-ASC	SC-APC bulkhead adapter tip
FFLX-01-AFC	FC-APC bulkhead adapter tip
FFLX-01-ALC	LC-APC bulkhead adapter tip
FFLX-01-A25	Universal 2.5 mm, APC ferrule adapter tip
FFLX-01-A125	Universal 1.25 mm, APC ferrule adapter tip
FFLX-01-EXTS46	FOCIS Flex adapter extension tube, straight, 46 mm
FFLX-01-EXTS80	FOCIS Flex adapter extension tube, straight, 80 mm:
DFS1-00-0023MR	E2000 PC/UPC bulkhead adapter tip
DFS1-01-0008MR	E2000 APC bulkhead adapter tip
DFS1-01-0007MR	Tip for SC/APC (OptiTap®) bulkhead adapter
DFS1-01-0013MR	Tip for OptiTip® APC ferrule and bulkhead adapter
DFS1-00-0050MR	Multi-row MTP/PC ferrule & bulkhead adapter extended tip kit (base plus multi-row MTP/PC front end tip)
DFS1-00-0037MR	MTP/PC ferrule & bulkhead adapter extended tip kit (base plus MTP/PC front end tip)
DFS1-00-0042MR	MTP/PC and MTP/APC ferrule & bulkhead adapter extended tip kit (base plus MTP/PC and MTP/APC front end tips)
DFS1-01-0010MR	MTP/APC ferrule and bulkhead adapter extended tip kit (base plus MTP/APC front end tip)
DFS1-00-0057MR	Adapter for Viavi/Westover tips, for DFS1 and FOCIS Flex inspection probe

FOCIS Flex Connector Inspection Accessories

AFL NO.	Description
1400-01-0107MZ	FOCIS Flex replacement soft carry case with strap
1400-05-0230PZ	FOCIS Flex replacement wrist strap
3900-04-0008ME	Replacement battery, 3.6V, NiMH, rechargeable
4050-00-0030MR	FOCIS Flex replacement AC charger
4050-00-0030USMR	Replacement US power plug for AC charger
4050-00-0030UKMR	Replacement UK power plug for AC charger
4050-00-0030EUMR	Replacement EU power plug for AC charger
6000-00-0031MR	Replacement USB – Micro-B cable, 5 pin, 6 ft
8800-02-0074MZ	FOCIS Flex replacement dust cap
FOCIS-FLX-1ENG	FOCIS Flex replacement Quick Reference Guide

October 15, 2016



FOCIS WiFi PRO Fiber Optic Connector Inspection Systems

The FOCIS WiFi PRO system combines AFL's powerful fiber connector inspection and analysis with the familiar ease of a smart device. FOCIS WiFi PRO works the way you do – connected to your phone or tablet. FOCIS WiFi PRO enables mobile workers to complete remote fiber optic connector inspection tasks while remaining connected to coworkers and managers.

The AFL FOCIS application software enables users to view live images on their smart devices, save, recall and share saved end-face images via e-mail, text of text attachment and mobile cloud applications like Dropbox and Google Drive.

All FOCIS WiFi PRO kits include TRM® 2.0, Test Results Manager software to prepare and print or save connector inspection reports using results uploaded from the FOCIS WiFi to a PC.



FOCIS WiFi PRO Kits with Adapter Tips and Cleaners

AFL NO.	Model and Description
FMPR-00-04XU	FOCIS WiFi PRO UPC kit. Includes DFS1 Digital FiberScope, Portable Application Link (PAL) with FOCIS WiFi PRO firmware, adapter tips (1.25 & 2.5 mm Universal, SC/FC, LC), adapter tip box, One-Click Mini-100 SC/ST/FC, One-Click Mini-100 LC/MU, AC adapter, FOCIS WiFi holster, hard carry case, TRM 2.0 Basic.
FMPR-00-04XA	FOCIS WiFi PRO APC kit. Includes DFS1 Digital FiberScope, Portable Application Link (PAL) with FOCIS WiFi PRO firmware, adapter tips (2.5 mm Universal, SC/APC, FC/APC), adapter tip box, One-Click Mini-100 SC/ST/FC, AC adapter, FOCIS WiFi holster, hard carry case, TRM 2.0 Basic.
FMPR-00-04XM	FOCIS WiFi PRO MPO kit. Includes DFS1 Digital FiberScope, Portable Application Link (PAL) with FOCIS WiFi PRO firmware, MTP/PC and MTP/APC adapter tips, One-Click Cleaner MPO, AC adapter, FOCIS WiFi holster, hard carry case, adapter tip box, TRM 2.0 Basic.
FMPR-00-04XD	FOCIS WiFi PRO Data Center kit. Includes DFS1 Digital FiberScope, Portable Application Link (PAL) with FOCIS WiFi PRO firmware, adapter tips (MTP/PC, MTP/APC, 1.25 mm Universal, LC/PC, One-Click MPO, One-Click Mini-100 LC/MU, AC adapter, FOCIS WiFi holster, hard carry case, adapter tip box, TRM 2.0 Basic.



FOCIS WiFi soft case kit

FOCIS WiFi PRO Kits in Soft Case without Adapter Tips and Cleaners

AFL NO.	Model and Description
FMPR-00-04XN	FOCIS WiFi PRO kit. Includes DFS1 Digital FiberScope, Portable Application Link (PAL) with FOCIS WiFi PRO firmware, AC adapter, FOCIS WiFi holster, adapter tip box, soft carry case, TRM 2.0 Basic.
FMPR-01-04XN	FOCIS WiFi PRO Upgrade kit for DFS1 owners. Includes Portable Application Link (PAL) with FOCIS WiFi PRO firmware, AC adapter, FOCIS WiFi holster, soft carry case, TRM 2.0 Basic.



FOCIS WiFi hard case kit

FOCIS WiFi PRO Kits in a Hard Carry Case without Adapter Tips and Cleaners

AFL NO.	Description
FMPR-00-04XN-HC	FOCIS WiFi PRO kit. Includes DFS1 Digital FiberScope, Portable Application Link (PAL) with FOCIS WiFi PRO firmware, AC adapter, FOCIS WiFi holster, hard carry case, adapter tip box, TRM 2.0 Basic.
FMPR-01-04XN-HC	FOCIS WiFi PRO Upgrade kit for DFS1 owners. Includes Portable Application Link (PAL) with FOCIS WiFi PRO firmware, AC adapter, FOCIS WiFi holster, hard carry case, TRM 2.0 Basic.

October 15, 2016



DFS1

DFS1 Digital FiberScope

The DFS1 Digital FiberScope supports magnified video inspection of optical fiber connector end-faces during fiber optic cable and connector installation and maintenance. The DFS1 connects via USB port to AFL's M-Series OTDRs) and C-Series OTDRs or Certification Testers to display and archive inspection images. An extensive array of adapter tips is available to support inspection of all commonly used fiber optic connectors. The DFS1 includes a software update for the M-Series OTDRs and C-Series OTDRs or Certification Testers. Fiber end-faces may also be viewed on a PC (using AFL SimpleView software) by connecting the DFS1 to the PC's USB port.

Model	Field of View	Adapter Mount	Focus	Power
DFS1 Digital FiberScope	~400 μm x 300 μm	Thread-on	Manual adjustment, 2 mm max travel	USB port of M-Series OTDR or C-Series OTDR or C-Series Certification Tester



AFL SimpleView

AFL SimpleView™ Fiber Inspection Software

AFL SimpleView Fiber Inspection Software is an application that permits the AFL DFS1 Digital FiberScope to be used with Windows® XP or Windows® 7 computers. AFL SimpleView software provides a live, high-resolution video image of the end-face of an optical fiber. This capability enables fiber installers and network technicians to inspect and troubleshoot optical fibers and verify that they are clean and undamaged.

AFL SimpleView software is available as a free download from AFL, www.AFLglobal.com.



DFS1-00-04XU

DFS1 Digital FiberScope and Inspection Kits

The DFS1 is available in three different kits, which provide either PC/UPC adapters, APC adapters, or no adapters. All kits include soft carry case, a storage box to hold up to six adapter tips, FiberScope display software update for M series OTDRs and C840 Certification Tester and a Quick Reference Guide.

AFL NO.	Description	
DFS-00-04XU	DFS1 Digital FiberScope PC/UPC Inspection kit includes: (1) DFS1-00-04X0MR DFS1 USB Digital FiberScope (1) DFS1-00-0001MR Universal 1.25 mm male PC adapter tip (1) DFS1-00-0002MR Universal 2.5 mm male PC adapter tip (1) DFS1-00-0003MR SC and FC female bulkhead adapter tip (1) DFS1-00-0004MR LC female bulkhead adapter tip (1) DFS1-04-0001MZ soft carry case for scope and adapters (1) 8500-05-0001MZ One-Click Cleaner SC, ST, FC (1) 8500-05-0002MZ One-Click Cleaner LC/MU (1) 1400-01-0093MZ 6-compartment adapter tip storage box (1) Digital FiberScope display software update for M210e, M310, M710, C840, C880	
DFS-00-04XA	DFS1 Digital FiberScope APC Inspection kit includes: (1) DFS1-00-04X0MR DFS1 USB Digital FiberScope (1) DFS1-01-0002MR Universal 2.5 mm male APC adapter tip (1) DFS1-01-0003MR SC/APC and FC/APC bulkhead adapter tip (1) DFS1-01-0011MR SC/APC bulkhead adapter tip (1) DFS1-04-0001MZ soft carry case for scope and adapters (1) 8500-05-0001MZ One-Click Cleaner SC, ST, FC (1) 1400-01-0093MZ 6-compartment adapter tip storage box (1) Digital FiberScope display software update for M210e, M310, M710, C840, C880	
DFS-00-04XN	DFS1 USB Digital Fiber Inspection kit without adapters includes: (1) DFS1-00-004X0MR DFS1 USB Digital FiberScope (1) Soft carry case for scope and adapters (1) 6-compartment adapter tip box (1) Digital FiberScope display software update for M210e, M310, M710, C840, C880	
SP2-DFS1-04X	2-year Service Plan for DFS1 kits If your DFS1 kit is found defective, AFL will repair or replace at no additional charge. Includes free return shipping and free replacement of worn adapter tips.	

October 15, 2016

DFS1 Accessories

AFL NO.	Description
DFS1-04-0001MZ	Soft carry case for DFS1 Digital FiberScope and adapters
1400-01-0093MZ	6-compartment adapter tip storage box
1400-01-0094MZ	11-compartment adapter tip storage box
DFS1-001-00	Digital FiberScope display software update for M210e, M310, M710, C840, C880
8500-05-0001MZ	One-Click Cleaner SC, ST, FC
8500-05-0002MZ	One-Click Cleaner LC/MU

DFS1 Adapter Tips

Following table identifies commonly required adapter tips. Other adapter tips available. Consult factory for additional adapter tips and prices.



DFS1-00-0001MR



DFS1-00-0002MR



DFS1-00-0004MR



DFS1-00-0013MR



DFS1-00-0045MR
~150 mm

AFL NO.	Description	Tip ID
PC Ferrule Connector Adapter Tips		
DFS1-00-0001MR	Universal 1.25 mm tip for PC ferrule connector	U125
DFS1-00-0002MR	Universal 2.5 mm tip for PC ferrule connector	U25
DFS1-00-0005MR	Universal 2.0 mm tip for PC ferrule connector	U20
DFS1-00-0006MR	Universal 1.6 mm tip for PC ferrule (termini)	T16M
DFS1-00-0038MR	Slim 1.25 mm probe tip for LuxCis and termini	T12M
DFS1-00-0039MR	Slim 2.5 mm PC ferrule tip for ELIO and termini	T25M
DFS1-00-0007MR	Tip for Biconic ferrule connector	BI
DFS1-00-0008MR	Tip for ELIO 1.25 mm ferrule connector	E12M
DFS1-00-0009MR	Tip for SMA 905 ferrule connector	SMA
SC/PC and FC/PC Bulkhead Adapter Tips		
DFS1-00-0003MR	Tip for SC/PC and FC/PC bulkhead adapter	FS
DFS1-00-0010MR	Short extended tip for SC/PC and FC/PC bulkhead adapter	FS
DFS1-00-0011MR	Medium extended tip for SC/PC and FC/PC bulkhead adapter	FS
DFS1-00-0012MR	Long extended tip for SC/PC and FC/PC bulkhead adapter	FS
DFS1-00-0013MR	60° angled tip for SC/PC and FC/PC bulkhead adapter	FS, A6
DFS1-00-0040MR	60° angled tip for SC/PC bulkhead adapter	SC, A6
ST/PC Bulkhead Adapter Tips		
DFS1-00-0014MR	Tip for ST/PC bulkhead adapter	ST
DFS1-00-0015MR	Short extended tip for ST/PC bulkhead adapter	ST
DFS1-00-0016MR	Medium extended tip for ST/PC bulkhead adapter	ST
DFS1-00-0017MR	Long extended tip for ST/PC bulkhead adapter	ST
DFS1-00-0018MR	60° angled tip for ST/PC bulkhead adapter	ST, A6
LC/PC Bulkhead Adapter Tips		
DFS1-00-0004MR	Tip for LC/PC bulkhead adapter	LC
DFS1-00-0019MR	Short extended tip for LC/PC bulkhead adapter	LC
DFS1-00-0020MR	Medium extended tip for LC/PC bulkhead adapter	LC
DFS1-00-0021MR	Long extended tip for LC/PC bulkhead adapter	LC
DFS1-00-0022MR	60° angled tip for LC/PC bulkhead adapter	LC, A6
E2000/PC Bulkhead Adapter Tips		
DFS1-00-0023MR	Short extended tip for E2000/PC bulkhead adapter	E2K
DFS1-00-0024MR	Medium extended tip for E2000/PC bulkhead adapter	E2K
DFS1-00-0025MR	Long extended tip for E2000/PC bulkhead adapter	E2K

DFS1 Adapter Tips (continued)

Following table identify commonly required adapter tips. Other adapter tips available. Consult factory for additional adapter tips and prices.

AFL NO.	Description	Tip ID	
MU/PC Bulkhead Adapter Tips			
DFS1-00-0026MR	Tip for MU/PC bulkhead adapter	MU	
DFS1-00-0027MR	Short extended tip for MU/PC bulkhead adapter	MU	
DFS1-00-0028MR	Medium extended tip for MU/PC bulkhead adapter	MU	
DFS1-00-0029MR	Long extended tip for MU/PC bulkhead adapter	MU	
DFS1-00-0030MR	60° angled tip for MU/PC bulkhead adapter	MU, A6	
MTP/MPO Multi-fiber Adapter Tips (ferrule and bulkhead)			
DFS1-00-0037MR	MTP/PC ferrule and bulkhead adapter extended tip; includes base plus MTP/PC front end tip	MTP ^{a, b}	
DFS1-00-0041MR	Front end tip for MTP/PC ferrule and bulkhead adapter	MTP ^b	
DFS1-00-0042MR	MTP/PC and MTP/APC ferrule and bulkhead adapter extended tip kit; includes base plus MTP/PC and MTP/APC front end tips	MTP, MTPA ^{a, b}	
DFS1-00-0050MR	Multi-row MTP/PC ferrule and bulkhead adapter extended tip kit; Includes base plus multi-row MTP/PC front end tip.	MTP ^{a, b}	
SC2 Bulkhead Adapter Tips			
DFS1-00-0043MR	Short extended tip for SC2 bulkhead adapter	SC2	
DFS1-00-0044MR	Medium extended tip for SC2 bulkhead adapter	SC2	
DFS1-00-0045MR	Long extended tip for SC2 bulkhead adapter	SC2	
Miscellaneous Adapter Tips			
DFS1-00-0056MR	Universal 60-degree angled extender adapter	A6A, U-A6	
DFS1-00-0031MR	Tip for LEMO 2.0 mm bulkhead adapter	LEMO	
DFS1-00-0032MR	Tip for LX.5/PC bulkhead adapter	LX	
DFS1-00-0033MR	Tip for 2.0 mm termini bulkhead adapter	T20F	
DFS1-00-0034MR	Tip for 1.6 mm termini bulkhead adapter	T16F	
DFS1-00-0036MR	Tip for ELIO 1.25 mm bulkhead adapter	E12F	
DFS1-00-0046MR	Tip for SMA 905 bulkhead adapter	SMAF	
DFS1-00-0047MR	TFOCA II ferrule and bulkhead adapter tip + guide kit	TFO-U TFO-G	
DFS1-00-0048MR	TFOCA II ferrule and bulkhead adapter guide only	TFO-G	
DFS1-00-0049MR	TFOCA II ferrule and bulkhead adapter tip only	TFO-U	
DFS1-00-0057MR	Adapter for Viavi/Westover tips, for DFS1 and FOCIS Flex inspection probe		
APC Tips			
DFS1-01-0001MR	Universal 1.25 mm tip for APC ferrule connector	U12A	
DFS1-01-0002MR	Universal 2.5 mm tip for APC ferrule connector	U25A	
DFS1-01-0003MR	Tip for SC/APC and FC/APC bulkhead adapter	FSA	
DFS1-01-0011MR	Tip for SC/APC bulkhead adapter	SCA	
DFS1-01-0004MR	Tip for LC/APC bulkhead adapter	LCA	
DFS1-01-0005MR	Short extended tip for SC/APC bulkhead adapter	SCAX	
DFS1-01-0006MR	60° angled tip for SC/APC bulkhead adapter	A6A	
DFS1-01-0007MR	Tip for hardened SC/APC (OptiTap®) bulkhead adapter	OTAPA	
DFS1-01-0008MR	Tip for E2000/APC bulkhead adapter	E2KA	
DFS1-01-0009MR	Tip for LX.5/APC bulkhead adapter	LXA	
DFS1-01-0010MR	MTP/APC ferrule and bulkhead adapter extended tip kit; includes base plus MTP/APC front end tip	MTPA ^{a, b}	
DFS1-01-0012MR	Front end tip for MTP/APC ferrule and bulkhead adapter	MTPA ^b	
DFS1-01-0013MR	Tip for OptiTap® APC ferrule and bulkhead adapter	OTIPA	



DFS1-01-0002MR



DFS1-01-0003MR

Notes:

- a. MTP extended tip marking includes S/N since these have moving parts.
- b. Base plus tip is required to inspect MPO/MTP connectors. All MPO/MTP connectors are inspected through bulkhead adapter.

October 15, 2016



OFS300

Microscopes for Connectors on Patch Cords (OFS300, VS300)

The OFS300-200C and VS300 are hand-held microscopes used for inspecting fiber optic connectors on patch cords and test jumpers.

The OFS300-200C is a high-resolution optical microscope with integrated infrared safety filter. The VS300 is a video microscope with no direct optical path from the connector under inspection to the user.

Each scope includes a 2.5 mm Universal adapter cap and neck strap. VS300 models also include a carry case.

The OFS300-200C and VS300 models use thread-on adapter caps (see [page 48](#)).



VS300

Model	Nominal Magnification	Adapter Mount	Infrared Safety Filter	Power	
OFS300-200C	200x	Thread-on	Schott KG3	(2) AA alkaline	
VS300	400x	Thread-on	Not required - no optical path to user	(2) AA alkaline	