

### NOYES® FOCIS Fiber Optic Connector Inspection System

U.S. Patents Pending



#### Features

- 0.5  $\mu\text{m}$  detection capability
- 1.0  $\mu\text{m}$  optical resolution
- 400  $\mu\text{m}$  x 350  $\mu\text{m}$  field of view
- Paired fiber images for comparing before/after, input/output, etc.
- Integrated focus and snapshot controls
- Capture, save, review and share images
- 1000 image files storage capacity

#### Applications

- Inspect-Clean-Inspect-Document workflow
- PC/UPC, APC and MPO/MTP connectors
- Document "as-built" or "as found" condition of patch cords and connectors

The NOYES family of FOCIS integrated fiber inspection solutions provides network personnel with the capability to document fiber connector cleanliness. FOCIS combines a palm-sized DFD1 Touchscreen Tablet, a DFS1 Digital FiberScope and AFL SimpleView Plus inspection software to provide the inspection and analysis power of current laptop and probe solutions and the ergonomics, ease of use, ruggedness and ownership costs of basic "live only" viewers. FOCIS solutions are future-proof because their optical resolution and detection specifications exceed current international standards and their software-based inspection and analysis applications can be upgraded as market requirements evolve.

The DFD1 Touchscreen Tablet is a purpose-built, hand-held Windows® computer equipped with AFL SimpleView Plus inspection software. Its bright, crisp display provides detailed images and its Zoom/Pan feature allow users to identify the smallest particles, scratches and imperfections. Its portrait orientation makes it easy to hold and operate with just one hand. Unique to FOCIS is a patent-pending feature, which simplifies before/after, jumper/bulkhead, input/output and other common fiber cleanliness comparisons. Additional features include image capture and store/recall. Up to 1000 fiber images may be stored in on-board memory and images may be transferred via any off-the-shelf USB memory stick or SD flash card. The DFD1 incorporates a proven shock-absorbing rubber boot that doubles as a tilt stand and hanger.

The DFS1 Digital FiberScope is a high resolution video inspection probe. It is equipped with a focusing knob and an image capture button. An extensive assortment of DFS1 adapter tips allow it to be used with all types of fiber connector ferrules and bulkhead connectors. Bulkhead tips are available in multiple lengths as well as straight and 60° angle. Connector adapters are available PC/UPC, APC polished ferrule in 1.25 mm, 2.5 mm and MTP/MPO connectors.

NOYES FOCIS solutions are packaged in a protective hard carry case that keeps all vital inspection and cleaning tools close at hand and ready to go to work.

\* User Interface is now available in English and Japanese.

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#### Available Product Configurations

NOYES FOCIS inspection systems are available in 5 different configurations to provide fiber installers, network activation crews and maintenance personnel with the essential tools needed to clean, inspect and document proper fiber end-face cleanliness. These kits combine inspection and cleaning products and are available in a standard hard carry case. All kits include a FOCIS DFD1 Touchscreen Tablet with AC adapter, AFL SimpleView Plus application software and a quick reference guide.

#### FOCIS PC/UPC Inspection and Cleaning Kit

This kit includes a DFD1 Touchscreen Tablet, a DFS1 Digital FiberScope, PC/UPC probe tip adapters, One-Click Mini cleaners for SC/FC/ST and LC/MU connectors in a hard carry case.

#### FOCIS APC Inspection and Cleaning Kit

This kit includes a DFD1 Touchscreen Tablet, a DFS1 Digital FiberScope, APC and PC/UPC probe tip adapters and One-click Mini cleaners for SC/FC/ST connectors in a hard carry case.

#### FOCIS MTP/MPO Inspection and Cleaning Kit

This kit includes a DFD1 Touchscreen Tablet, a DFS1 Digital FiberScope, APC and PC/UPC MTP/MPO probe tip adapters and MPO/MTP® cleaner in a hard carry case.

#### FOCIS Inspection Kit (No Tips or Cleaners)

This kit includes a DFD1 Touchscreen Tablet and a DFS1 Digital FiberScope in a hard carry case.

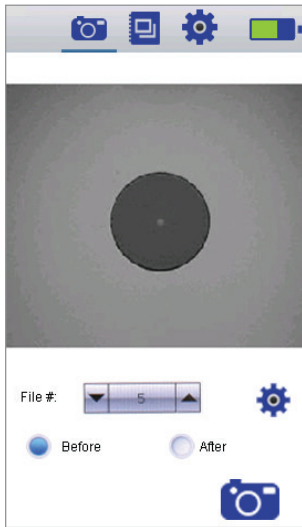
#### FOCIS Upgrade Kit for DFS1 Owners

This kit is designed to allow an existing DFS1 Digital FiberScope owner to upgrade to the FOCIS system. This kit includes only a DFD1 Touchscreen Tablet and is available in a hard carry case.

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#### Powerful Inspection and Image Management Features



Live Image Mode

#### Live Image Mode

The FOCIS system includes a Live Image viewing mode that works just like any legacy fiber inspection scope. Images transmitted by the DFS1 FiberScope are presented on the hand-held DFD1 Touchscreen Tablet. The system provides a high resolution display with a field of view of approximately 350 x 400 μm.

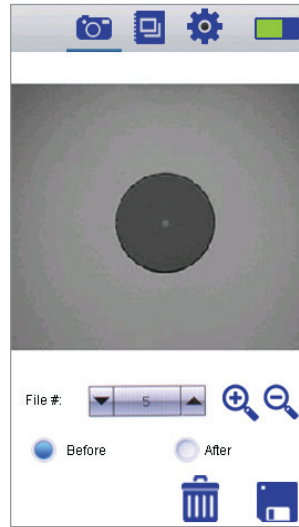
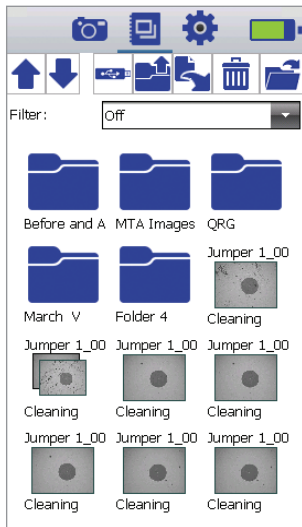


Image Capture Mode

#### Capture Mode with Zoom and Pan

FOCIS enables users to capture live images for the purpose of subsequent inspection and for documenting fiber end-face conditions. Once a snapshot has been captured, the user has the option of Zooming and Panning the image, deleting the image or saving it to a folder. The FOCIS system can store more than 1000 fiber images in memory.



File Manager

#### File Manager with Image Browser

FOCIS enables users to store fiber images in internal memory and to transfer images to an external memory stick. File management features include folder hierarchy and file naming capabilities.

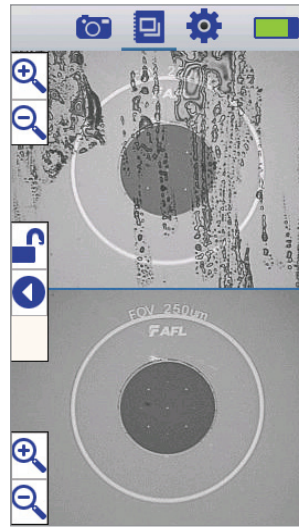


Image Review - Pair Image Mode

#### Review Mode with Image Pair Option

FOCIS features the unique ability to pair images as before/after, input/output, cleaning, mating other common fiber cleanliness comparisons. Easy-to-use Zoom and Pan touchscreen controls provide users with the capability to closely inspect any portion of the fiber image.

\* User Interface is now available in English and Japanese.

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**Specifications <sup>a</sup>**

<b>SYSTEM PERFORMANCE</b>	
Detection Capability	0.5 µm
Optical Resolution	1.0 µm
Field of View	400 µm x 350 µm
Battery Life <sup>b</sup>	120 minutes
Battery Recharge Time <sup>c</sup>	5.5 hours
Operating Temperature	0 to +50°C
Storage Temperature	-10 to +70°C
Relative Humidity	0 to 95 % RH (non-condensing)
<b>DFD1</b>	
Display Type	TFT LCD
Display Size	127 mm (5 in), 9:16 aspect ratio
Display Resolution	WQVGA, 480 x 272 pixels
Unit Size without boot (L x W x H)	144 x 88 x 20 mm (5.7 x 3.5 x 0.8 in)
Weight	220 g (7.7 oz)
Power	Li-Ion battery or AC power adapter, 100 – 240 VAC input
<b>DFS1 DIGITAL FIBERSCOPE</b>	
Focus Range	2 mm travel
Probe Size (without tip)	35 x 175 mm (1.4 x 6.9 in)
Weight	200 g (7.1 oz)
Light Source	Blue LED
Power Source	USB port

**Notes:**

- a. All specifications valid at 23°C ±2°C (73.4°F ±3.6°F) unless otherwise specified.
- b. Typical with new battery.
- c. Typical, from fully discharged to fully charged state, unit may be operating.

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**Ordering Information**

**NEW** User Interface is now available in English and Japanese.

MODEL	DESCRIPTION	AFL NO.
FOCIS-210	<b>FOCIS PC/UPC Inspection and Cleaning Kit</b> Includes DFD1 Touchscreen Tablet, AFL SimpleView Plus software, DFS1 FiberScope, (1) Universal 1.25 mm male PC tip, (1) Universal 2.5 mm male PC tip, (1) SC/FC female bulkhead tip, (1) LC female bulkhead tip, (1) adapter tip box, (1) One-Click Mini-100 SC/ST/FC, (1) One-Click Mini-100 LC/MU, AC adapter, quick reference guides, hard carry case	FOCIS-00-04XU
FOCIS-211	<b>FOCIS APC Inspection and Cleaning Kit</b> Includes DFD1 Touchscreen Tablet, AFL SimpleView Plus software, DFS1 FiberScope, (1) Universal 2.5 mm male APC tip, (1) SC/APC and FC/APC female bulkhead tip, (1) SC/APC female bulkhead tip, (1) One-Click Mini-100 SC/ST/FC, adapter tip box, AC adapter, quick reference guides, hard carry case	FOCIS-00-04XA
FOCIS-212	<b>FOCIS MTP/MPO Inspection and Cleaning Kit</b> Includes DFD1 Touchscreen Tablet, AFL SimpleView Plus software, DFS1 FiberScope, MTP/PC and MTP/APC ferrule and bulkhead tip, MTP/MPO base, MTP/PC and MTP/APC front end tips, MPO/MTP® cleaner, AC adapter, quick reference guide, hard carry case	FOCIS-00-04XM
FOCIS-213	<b>FOCIS Inspection Kit. No Tips or Cleaners</b> Includes DFD1 Touchscreen Tablet, AFL SimpleView Plus software, DFS1 FiberScope, AC adapter, quick reference guides, hard carry case	FOCIS-00-04XN
FOCIS-100	<b>FOCIS Upgrade Kit for DFS1 Owners</b> Includes DFD1 Touchscreen Tablet, AFL SimpleView Plus software, AC adapter, quick reference guide, hard carry case	FOCIS-00-04NN
FSP-200	<b>2-year Service Plan for FOCIS-2XX kits</b> If your FOCIS kit is found to be defective, NOYES will repair or replace at no additional charge. Includes free return shipping and free replacement of worn components (limited to AC adapters, rubber boots, adapter tips and factory-provided USB adapter cable).	SP2-DFD1-04X
FSP-100	<b>2-year Service Plan for FOCIS-1XX kits</b> If your FOCIS kit is found to be defective NOYES, will repair or replace at no additional charge. Includes free return shipping and free replacement of worn components (limited to AC adapters, rubber boots, and factory-provided USB adapter cable).	SP2-DFD1-04N



DFS1 Adapter Tips

**DFS1 Digital FiberScope Adapter Tips**

An extensive assortment of the DFS1 adapter tips is available to support inspection of various bulkhead adapters and connectors. 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. For more details on available DFS1 FiberScope connector adapters, refer to the DFS1 Adapter Tips Selection Guide available at [www.AFLglobal.com](http://www.AFLglobal.com).



**NOYES International Sales and Service Contact Information**

Available at [www.AFLglobal.com/NOYES/Contacts](http://www.AFLglobal.com/NOYES/Contacts)