

# Maximize Your Industrial Ethernet Uptime

The cause of most Industrial Ethernet downtime? Cabling. Broken connectors. Failed shields. Moisture intrusion. Too long. EMI susceptibility. Dirty fiber.

But it doesn't have to be that way. We've got the tools and support to help you achieve faster startup, prevent unplanned downtime and speed troubleshooting.



**STARTUP FASTER. PREVENT DOWNTIME.  
SPEED TROUBLESHOOTING.**

## **DSX CableAnalyzer™ Industrial Ethernet Kit**

### **Validate that cables conform to international standards**

- Startup faster: Ensure cable performance at machine builder, commissioning and after making changes
- Prevent downtime: Find marginal cables susceptible to vibration, moisture, noise and temperature
- Speed troubleshooting: Avoid wasting time installing bypass cables. Identify the exact type and location of cable failure—or prove it's good
- Pass/Fail indication in 10 seconds
- Supports cabling for EtherNet/IP™, PROFINET, ModBus TCP™ and other protocols
- Supports RJ45 and M12 connectors
- Documentation of test results for commissioning

The DSX2-5-IE-K1 provides complete testing for copper cabling from single pair to Cat 6A, and includes adapters for RJ-45, M12-D and M12-X. Approved by over 30 cabling manufacturers.



## **OPTIONAL FIBER OPTIC TEST MODULES FOR DSX**

### **CFP-Q-Add CertiFiber™ Module**

- Optical loss modules provide automatic Pass/Fail analysis to industry standards
- Supports multimode and single mode at four wavelengths



### **OFP-Q-Add OptiFiber™ Module**

- OTDR module to identify all connections on a fiber link and attenuation at each
- Identify splices and associated attenuation and lengths



# COPPER CABLE TROUBLESHOOTING AND CONNECTIVITY

## MicroScanner™ Industrial Ethernet Cable Verifier

- Graphically displays length, wiremap, opens/shorts and distance to fault
- Detects the class (0-8) from PoE, PoE+ and PoE++ (802.3at/af/bt) switches
- Identifies presence and speed of an active switch connected to the cable
- Tests RJ-45 connections and includes adapters for M8D, M12D, and M12X connectors



## LinkIQ™ Industrial Ethernet Cable + Network Tester

- Ethernet switch name, port, and link configuration
- Measure and document cabling performance (10 Mbps to 10 Gbps)
- Detects class (0-8) from PoE, PoE+ and PoE++ (802.3at/af/bt) switches. Applies load to determine actual power available.
- Displays cable length wiremap, open/shorts and distance to fault
- Tests RJ-45 connections and includes adapters for M8D, M-12D, and M-12X connectors



# SOLUTIONS FOR FIBER OPTIC CONTAMINATION

## The #1 problem affecting Industrial Ethernet fiber cables

### FI-500 FiberInspector™ Micro

- PortBright™, a built-in flashlight illuminates dark areas
- Autofocus for stable images in few seconds
- Large display to view fiber endfaces
- Includes 4 UPC tips (LC, SC, 1.25 mm and 2.50 mm).
- APC, Bulkhead tips available
- Autocenter for precise fiber ferrule inspection



### Fiber Optic Cleaning Kits

The complete solution for precision end-face fiber optic cable cleaning



# OUR TOOLS WILL HELP YOU REDUCE MACHINE START-UP TIME AND PRODUCTION DOWNTIME



	MS-PoE-IE	LIQ-100-IE	DSX2-5-IE-K1
	Cable Continuity Tester	Cable + Network Tester	Cable Commissioning Tester
Validate to international standards			√
Pre-deployment acceptance tests			√
Parametric tests on cable and connectors			√
Find connections susceptible to vibration, moisture, temperature and EMC/EMI			√
Fiber optic tests			√ (requires optional fiber modules)
Documentation of test results for commissioning	None	Summary results in tester and via PC	Complete results in tester, PC and Cloud
User interface	Monochrome	Large color touch screen	Large color touch screen
Network speed and loss tests		Ethernet 10BASE-T to 10GBASE-T	Tests to international standards for cable type
Switch tests	Speed, duplex, PoE class	Speed, duplex, PoE class, switch name, port number, VLAN	
Contunity, length and tone generation	√	√	√

## SERVICE AND SUPPORT

**Our tools are only the start. Get the support you need from the leader in cable testing solutions.**

- Expertise on Industrial Ethernet  
[www.flukenetworks.com/Industrial](http://www.flukenetworks.com/Industrial)
- A knowledge base featuring over 1,000 articles on cable testing topics
- Hundreds of hours of videos including product training, troubleshooting tips, and more
- Worldwide service and training
- A support team with over 150 years of cable testing experience



For a complete view of cable testing technology and Standards information. Visit our basic testing solutions center at: [flukenetworks.com/industrial](http://flukenetworks.com/industrial)

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