

Take control of your industrial network

Fluke Industrial Ethernet solutions will quickly troubleshoot industrial network issues—and keep them from occurring again.

Ethernet adoption is expanding rapidly across a wide range of industrial environments. Many control environments have introduced ways to manage complex systems and support real-time applications that are essential to factory automation.

As the migration to Industrial Ethernet occurs, one thing remains critical—network uptime. We know that network uptime is crucial to profitability and the quality of your output, and that one failure can trigger others and result in a significant loss of time and money.

Fluke industrial ethernet tools are designed to keeping your network up and running. With rugged, reliable tools designed to withstand the harsh and fast-paced industrial environment, and the gold-standard professional network tools that deliver ultimate network SuperVision, Fluke industrial ethernet tools provide a solution set to address the uniqueness of the industrial control environment, the professionals who work there, and the challenges that they face every day.



Don't wait for the process control network to go down

Troubleshooting downtime issues can be time-intensive and costly, especially when not equipped with the correct tools. Fluke industrial ethernet tools have what you need to prevent and quickly troubleshoot the most common issues that could wreak havoc on your industrial ethernet.

There are three primary areas where issues can occur: the network, electrical signaling, or cabling infrastructure.

Network Issues

- Unexpected and/or unwanted network traffic
- Insufficient bandwidth supervision
- Network failures caused by noisy/harsh environments
- Improper security configurations
- Improper VLANs and multicasting segmentation

Recommended solutions

- EtherScope™ Network Assistant
- LinkRunner™ Pro Network Multimeter

Electrical Signaling Issues

- Device installation errors
- Inconsistent or inefficient power delivery
- Device failures caused by harsh electrical environment – transients, disturbances, static discharge
- Device failures caused by harsh physical environment – extreme humidity and temperature changes, vibration

Recommended solutions

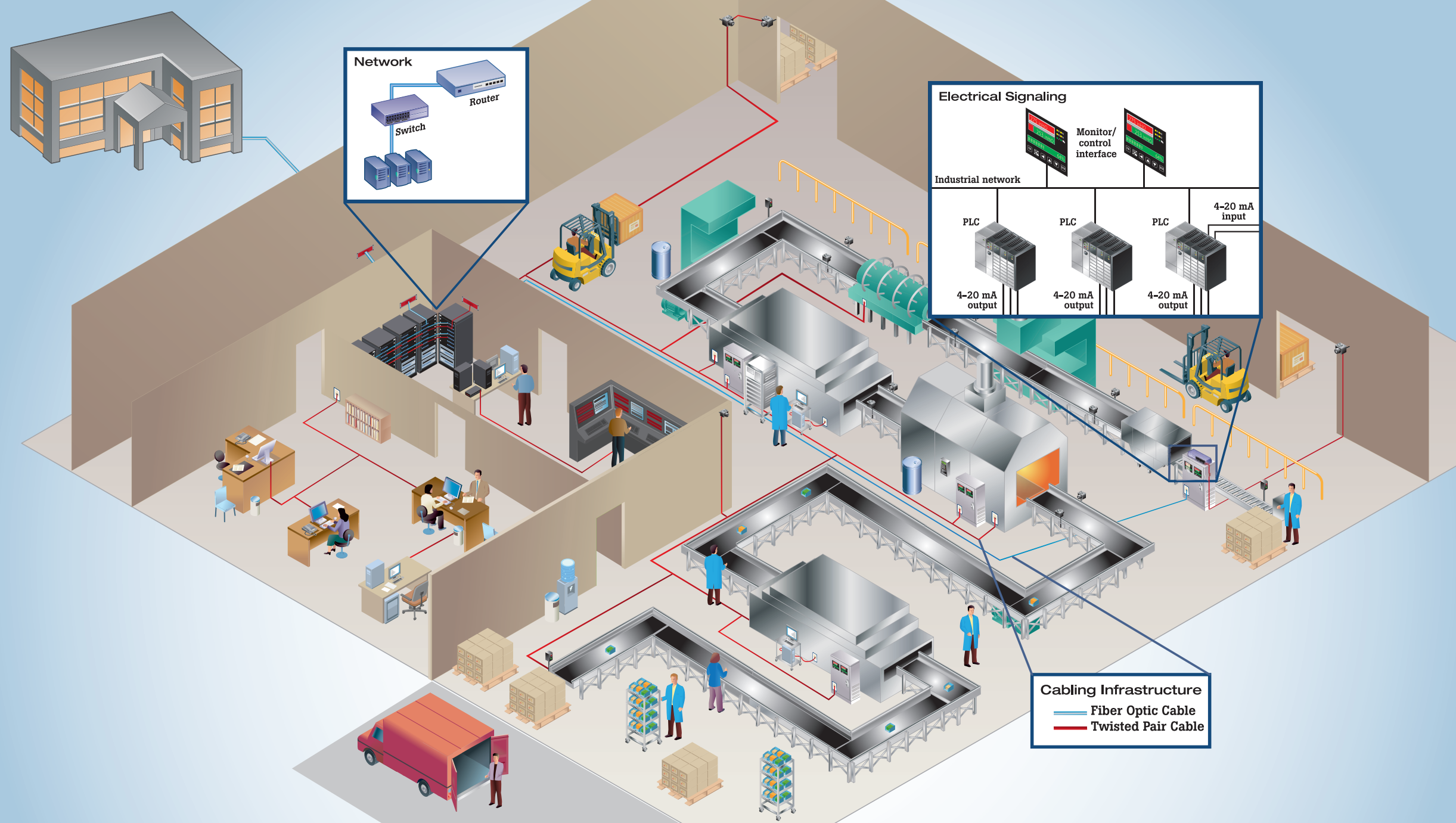
- Fluke 125 Industrial Network Test
- Fluke 771 mA Clamp Meter

Cabling Infrastructure Issues

- Poor cable terminations or cable faults causing network failures
- Insufficient cable rating to support Cat 5e or Gigabit ethernet
- Contaminated fiber optic cable endfaces resulting in increased signal loss
- Poor cross connects through junction boxes due to tough environmental conditions
- Inability to isolate test cables resulting in time-intensive guesswork

Recommended solutions

- DTX CableAnalyzer™ Series
- CableIQ™ Qualification Tester
- MicroScanner² Cable Verifier
- OptiFiber® OTDR
- Fiber Verification Kit



Network tools



EtherScope™
Network
Assistant



LinkRunner™ Pro
Network
Multimeter



Fluke
215C/225C
ScopeMeter



Fluke 125
Industrial
Network Test



Fluke 771
mA Clamp
Meter

Electrical signaling tools



DTX
CableAnalyzer™
Series



CableIQ™
Qualification
Tester



MicroScanner²
Cable Verifier



OptiFiber®
OTDR

Cabling infrastructure tools



Fiber
Verification Kit



EtherScope™ Network Assistant	LinkRunner™ Pro Network Multimeter	Fluke 215C/225C Color ScopeMeter	Fluke 125 Industrial Network Test	Fluke 771 mA Clamp Meter	DTX CableAnalyzer™ Series	CableIQ™ Qualification Tester	MicroScanner² Cable Verifier	OptiFiber® OTDR	Fiber Verification Kit
Network		Electrical Signaling			Cabling Infrastructure				

Network	Verify Ethernet device connectivity	•	•							
	Map/discover network devices	•								
	Identify device protocols	•								
	Monitor network transmission errors	•								
	Measure network performance	•								
Electrical Signaling	Analyze physical layer waveform			•	•					
	Measure bus-health to standards (CAN-bus, Control-Net, MODbus, Ethernet/IP)			•	•					
	Measure distortion/jitter			•	•					
	Measure mA signal for PLC and control system				•					
	Measure 4-20 mA output signals without breaking the loop				•					
Cabling Infrastructure	Test cable continuity (twisted pair, coax or fiber optic)	•	•		•	•	•	•	•	•
	Test cable/termination impedance and capacitance				•					
	Identify distance to fault/short (Twisted Pair, Coax, Fiber Optic)	•	•			•	•	•	•	
	Locate cable using built-in tone generator	•					•	•		
	Qualify cable transmission rates (10/100Mbps, VOIP, 10Gig)					•	•			
	Certify cable installation to industry standard					•			•	
	Measure alien crosstalk, interference					•				
	Verify optical power or fiber link loss	•							•	•
	Analyze fiber OTDR trace								•	
All	Capture baseline and document results (Pass/Fail)	•	•		•	•			•	•