TECHNICAL DATA

Fluke Networks Industrial Ethernet DSX CableAnalyzer™ Kit


FLUKE networks
VERSIV 2
VERSIV
Cabling Certification System
HOME
TEST
FLUKE networks
VERSIV 2 REMOTE
PASS
TEST
FAIL
TALK
TONE
LOW BATTERY
TALK
TEST


FLUKE networks
DSX-PLA004
CAT 6A / CLASS E_A
PERMANENT LINK ADAPTER
FLUKE networks
VERSIV 2
1DF 15-1-D/X09
PASS
WIRE MAP
PERFORMANCE
TIA Cat 6A Perm. Link
LENGTH (194 ft)
RESISTANCE
INSERTION LOSS (17.5 dB)
RETURN LOSS (7.7 dB)
NEXT (1.5 dB)
PS NEXT (3.7 dB)
ACR-N (8.5 dB)
HOME
TEST
CNS3AABAAA
CNS3AABAAA
48 PORT INLINE POWER CAPABLE
SWITCHING MODULE

Key features

- Certifies copper cable for TIA category 5 through 6A
- Shows Pass/Fail in 10 seconds, with full measurement details
- Supports RJ45, M12D, and M12X connectors
- Documents results with LinkWare™ PC

Product overview: Fluke Networks Industrial Ethernet DSX CableAnalyzer™ Kit

Studies show that half of Industrial Ethernet problems are caused by cabling. The DSX CableAnalyzer validates cable performance to TIA 1005-A and ISO 11801:3 standards, allowing industrial companies and machine builders to ensure compliance, start up faster, and reduce production down time.

The DSX CableAnalyzer works on cables running EtherNet/IP™, Profnet™, ModBus TCP™, EtherCAT, plus other protocols. It offers touchscreen project management, TIA Level IIIe accuracy, and advanced troubleshooting, all with integrated Wi-Fi and 8-hour battery life.

The kit includes the Versiv mainframe and remote units, a reference module, adapters, commonly used accessories, and a statement of calibration.

Specifications: Fluke Networks Industrial Ethernet DSX CableAnalyzer™ Kit

Cable types	
Shielded and unshielded pair LAN cabling	TIA Category 3, 4, 5, 5e, 6, 6A, 8: 100 Ω ISO/IEC Class C, D, E, E_A, F, F_A and I/II: 100 Ω and 120 Ω
Standard link interface adapters	
Permanent link adapters	Plug type: shielded RJ45 Optional Plug type: Tera
Channel Adapters	Jack type: shielded RJ45 Optional Jack type: Tera, GG45
Test standards	
TIA	Category 3, 4, 5, 5e, 6, 6A, 8 per TIA 568-C.2
ISO/IEC	Class C and D, E, E_A, F, F_A and I/II certification per ISO/IEC
Maximum frequency	DSX-5000: 1000 MHz
General specifications	
Speed of Autotest	DSX-5000: Full 2-way Autotest of Category 5e or 6/Class D or E: 9 seconds. Full 2-way Autotest of Category 6A/Class E_A: 10 seconds

Supported test parameters (The selected test standard determines the test parameters and the frequency range of the tests)	Wire Map, Length, Propagation Delay, Delay Skew, DC Loop Resistance, Pair-to-Pair Resistance Unbalance, Pair Resistance Unbalance, Insertion Loss (Aenuation), Retu Loss (RL), Common Mode Retu loss (CMRL), Near End Crosstalk (NEXT), Far End Crosstalk (FEXT), Aenuation-to-crosstalk Ratio (ACR-N), ACR-F (ELFEXT), Power Sum ACR-F (ELFEXT), Power Sum NEXT, Power Sum ACR-N, Power Sum Alien NEXT (PS ANEXT), Power Sum Alien Aenuation NEXT Ratio Far End (PS AACR-F), Common Mode to Differential Mode NEXT (CDNEXT),Transverse Conversion Loss (TCL), Equal Level Transverse Conversion Transfer Loss (ELTCTL)
Input protection	Protected against continuous telco voltages and 100 mA over-current. Occasional ISDN over-voltages will not cause damage
Display	5.7 in LCD display with a projected capacitance touchscreen
Case	High impact plastic with shock absorbing overmold
Dimensions	Main Versiv unit with DSX module and baery installed: 2.625 in x 5.25 in x 11.0 in (6.67 cm x 13.33 cm x 27.94 cm)
Weight	Main Versiv unit with DSX module and baery installed: 3 lbs, 5oz (1.28 kg)
Main unit and remote:	Lithium ion baery pack, 7.2 V
Typical baery life:	8 hours
Charge time*	Tester off: 4 hours to charge from 10 % capacity to 90 % capacity.
Languages supported	English, French, German, Italian, Japanese, Portuguese, Spanish, Chinese, Korean, Russian, Trad Chinese, Czech, Polish, Swedish, Hungarian
Calibration	Service center calibration period is 1 year
Integrated Wi-Fi	Meets IEEE 802.11 a/b/g/n; dual band (2.4 GHz and 5 GHz)

Environmental specifications	
Operating temperature	32°F to 113°F (0°C to 45°C)
Storage temperature	-14°F to +140°F (-10°C to +60°C)
Operating relative humidity	0 % to 90 %, 32°F to 95 °F (0°C to 35°C) 0 % to 70 %, 95°F to 113 °F (35°C to 45°C)
Vibration	Random, 2 g, 5 Hz-500 Hz
Shock	1 m drop test with and without module and adapter
Safety	CSA 22.2 No. 61010, IEC 61010-1 3rd Edition
Operating altitude	13,123 ft (4,000 m) 10,500 ft (3,200 m) with ac adapter
EMC	EN 61326-1

Performance specifications **		
DSX-5000	Category 6A/Class E_A test modes (or lower link categories)	Exceed Level IIIe requirements of TIA 1152 and Level IV of IEC 61935-1.
	Class F_A test modes	Exceed Level V requirements as in the draft 4th edition of IEC 61935-1.

Length of twisted pair cabling[1]		
	Without remote	With remote
Range	800 m (2600 ft)	150 m (490 ft)

Resolution	0.1 m or 1 ft	0.1 m or 1 ft
Accuracy	± (0.3 m + 2 %); 0 m to 150 m ± (0.3 m + 4 %); 150 m to 800 m	± (0.3 m + 2 %)

Propagation delay		
	Without Remote	With Remote
Range	4000 ns	750 ns
Resolution	1 ns	1 ns
Accuracy	± (2 ns + 2 %); 0 ns to 750 ns ± (2 ns + 4 %); 750 ns to 4000 ns	± (2 ns + 2 %)

Delay skew	
Range	0 ns to 100 ns
Resolution	1 ns
Accuracy	± 10 ns

DC loop resistance test	
Range	0 Ω to 540 Ω
Resolution	0.1 Ω
Accuracy	± (1 Ω + 1 %)
Overload recovery time	Less than 10 minutes to rated accuracy following an overvoltage. Referencing is required after repeated or prolonged overvoltage.

*Available in certain geographies currently

**Applies to accessories in the original product purchase

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