



TestPro CV100 Multifunction Cable Tester

Test More. Test Faster. Test for Less.

Need an Affordable, Upgradeable Alternative for Cable Certification?

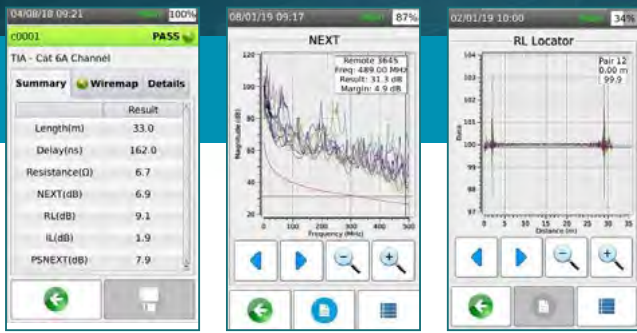
The TestPro delivers fast, accurate copper and fiber certification testing for a fraction of what you're paying now.

- Low-Cost Options Add Network, PoE, Multi-gig, and Wi-Fi Testing
- 2-Year Warranty
- Warranty Program Approved by All Leading Cable Manufacturers
- Perfect for Cabling Contractors



Intertek



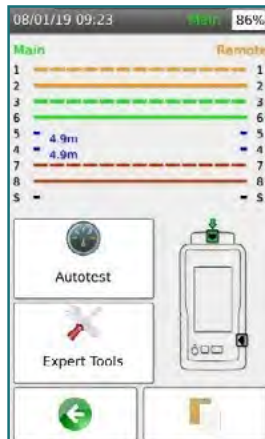


Copper Certification

The TestPro platform features the most sophisticated RF measurement engine available and has independent ETL/Intertek verification of ANSI/TIA-1152-A (Levels IIIe and 2G), IEC 61935-1 Ed. 4 (Levels IIIe, IV and V) and IEC 61935-1 Ed. 5 Draft 46/595/CD (Levels VI Class I and II), and a 3GHz frequency range. What this means to you is that you can be assured of your certification results for CAT5e – CAT8 with an accuracy range that not only exceeds industry standards but even older well-known cable testers and that your testing needs will be met today and tomorrow. TestPro has also been approved by industry leading cable manufactures in support of their warranty programs.

As part of the six second CAT6A standard Autotest, TestPro will perform these measurements for both Channel and Permanent Link.

- Length Including Distance to Fault
- Propagation Delay
- Delay Skew
- Loop Resistance
- DC Resistance Unbalance for Both Pair to Pair & Within a Pair
- Return Loss
- Impedance
- Insertion Loss
- NEXT
- PSNEXT
- ACRF
- PSACRF
- TCL
- ELTCTL



TestPro's LiveWiremap™ facilitates rapid cable continuity testing with automatic display of result the moment the cable is attached. TestPro offers fault location for Return Loss and NEXT aiding in problem identification. Support for MPTL, Patch Cord, Cat8, and Coax is available through hot swappable adapters. At the completion of the Autotest, you get a highly visible Pass or Fail indication, and test results can be automatically saved with a customizable labeling scheme.

TestPro will store over 10,000 results in memory, but when it's time to prepare printed reports, the included TestDataPro PC based software provides a way to organize and manage results and provide printed reports. If you're testing PoE and Multi-Gigabit Ethernet in addition to cable certification, you can even produce printed reports that include all three measurements by combining the results of a certification Autotest and a Multi-Gigabit Autotest. Test results can be imported into TestDataPro by either direct connect USB cable or USB Flash drive. Cloud based results data transfer available in Q3/20.

Both Channel and Permanent Link Adapters are included in the TestPro CV100-K50, K51, K60, K61 Kits.

Key Highlights:

- All product kits come with two full function platforms, each with their own certificate of calibration.
- Two platforms mean complete test results are displayed on both Main and Remote and Autotest can be initiated from either end.
- In cases where you are performing tests into a switch such as PoE and Multi-Gigabit testing, each platform can be independently deployed giving you double the test equipment to get the job done.
- The modular platform allows you to add functionality as budget supports, your needs change or we introduce new testing capabilities.

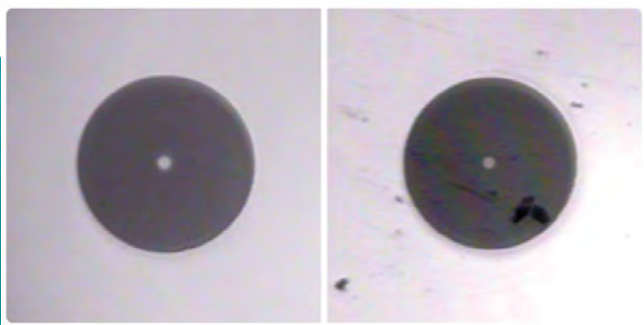


Fiber Optic Certification



As part of the four second Autotest, TestPro will perform the following measurements for both Singlemode and Multimode.

- **Dual Ended Loss**
- **Single Ended Loopback Loss**
- **Length and Propagation Delay**
- **Optical Power Meter**
850nm, 1300nm, 1310nm, 1550nm
- **Integrated Voltmeter**
- **Live Wiremap**
- **Printed Report Includes Test Data and Compliant Networks**



After Cleaning

Before Cleaning

TestPro's fiber optic measurements provide Tier-1 certification in compliance with IEEE 802.3 series, TIA-568.3-D, IEC-14763-3, as well as customizable limits for both Multimode and Singlemode Fiber Optic premise cabling. Additionally, these adapters include an integrated Visual Fault Locator (VFL) to provide a quick indication of a break in the fiber, as well as an integrated connection port for measuring electrical voltage for hybrid powered fiber applications in support of smart building initiatives. Encerclad Flux (EF) compliant multimode source means no need for bulky external adapters. Fiber optic test kits include, reference launch cords, coupler, interchangeable FC on TX port and interchangeable LC on RX port, cleaning kit, and carrying case. SC and FC adapters and reference launch cords are available as accessory items and sold separately.

Multimode adapters support testing of OM5 fiber in addition to earlier generation fiber standards. For deployments where powered fiber is being used, TestPro's fiber adapter provides not only certification of the fiber optic cable but also provides you with the ability to validate electrical voltage on the adjacent copper wire in this hybrid cable type. This allows you to measure the electrical input voltage going into a PoE extender that is supplying PoE to end devices, and is a convenience for the technician to have everything needed for testing at their fingertips. Combine that with TestPro's ability to measure actual PoE load (requires AD-NET-CABLE adapter) and you have a powerful solution with a unique set of capabilities that will allow you to verify and troubleshoot across various points in the network typology.

In single fiber applications, TestPro fiber adapters can be configured as a light source and receiver in power meter mode.



Both SM and MM Adapters are included in the TestPro CV100-K11, K51, K61 Kits.

These Adapters are also sold separately models AD-SM-01 and AD-MM-01.

Fiber End-Face Inspection

One of the most common reasons for fiber test failures is a dirty end-face on a fiber connection. Optional adapters are available to provide a clear view of the fiber.

TestDataPro Results Management Software


sm_cer_200m


Test Time : 14/1/2019 11:38:59 AM
Project : Single mode
Profile : SM Fiber
Operator : Default

Performance Grade : OS1
Configuration : Loopback
No. Connectors : 2
Connector Loss : 0.75

Limit : Certification
Model : TestPro CV100 (Main: 4200-0144, Remote:)
Device Software : 2.1.A9.1
Calibration Date : Friday, 11 January, 2019

Length(m) : 64.9
Delay(ns) : 472.8
No. Splices : 0
Splice Loss : 0.1

1310 nm

Pair	Result	Data	Limit	Margin
Fiber 1 Main to Remote	Pass	0.40	1.00	0.60
Fiber 2 Remote to Main	Pass	0.40	1.00	0.60



1550 nm

Pair	Result	Data	Limit	Margin
Fiber 1 Main to Remote	Pass	0.45	1.00	0.55
Fiber 2 Remote to Main	Pass	0.45	1.00	0.55

Compliant Network

FDDI SMF-PMD	1000BASE-LX
10GBASE-LX4	10GBASE-ER
10GBASE-LR	40GBASE-LR4
40GBASE-FR	100GBASE-LR4
100GBASE-ER4	Fibre Channel (FC-PH) at 1062Mbit/s
1Gbit/s FC	2Gbit/s FC
4Gbit/s FC	8Gbit/s FC
16Gbit/s FC	32Gbit/s FC
ATM at 52 Mbit/s	ATM at 155 Mbit/s
ATM at 822 Mbit/s	

Singlemode Fiber Test Report


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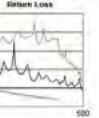
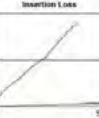
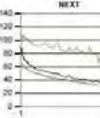
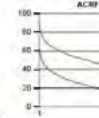
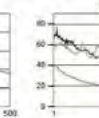
Test Time : 11/20/2019 2:31:44 PM
Profile : Default
Operator : Lora Schaefer
Cable Type / NVP : CAT 6A UTP - 68
Connector : RJ45 Plug

Limit : TIA-4 Channel
Model : TestPro CV100 (Main: 5200-0057, Remote: 5200-0058)
Device Software : 1.3.1
Calibration Date : Monday, August 6, 2018
Main Adapter : PROBE CAT 6A CHANNEL
Remote Adapter : PROBE CAT 6A CHANNEL

Parameter	Result	Pair	Max Value	Limit
Length(m)	Info	79	15.2	338.1
Prop. Delay(ns)	Pass	17	15.0	585.0
Delay Skew(ns)	Pass	12	1.9	33.0
Loop Resistance(Ω)	Status	78	0.049	25.000
Ret. Loss(dB, pair gain[D])	Info	12.36	0.000	8.200
Ret. Loss(dB, wire-wire[D])	Info	18	0.018	8.200

RF Parameters

Parameter	Result	Pair	Worst Margin-Main		Worst Value-Main		Worst Margin-Remote		Worst Value-Remote						
			Margin (dB)	Limit (dB)	Value (MHz)	Pair	Margin (dB)	Limit (dB)	Value (MHz)	Pair	Value (MHz)				
Return Loss	Pass	36	49.7	75.0	1.75	45	24.5	200.00	78						
Insertion Loss	Pass	12	2.4	3.0	2.65	78	1.4	493.00							
NEXT	Pass	26-45	33.8	55.0	2.95	45-78	75.7	255.00	26-45	3.0	34.5	223.00	26-45	27.8	223.00
PSACR	Pass	64	58.5	45.0	2.61	58	64.4	585.00	58	8.3	11.1	255.00	58	39.8	444.00
ACR	Pass	45-78	29.7	39.5	15.25	45-78	65.8	491.00	45-78	26.8	42.8	10.42	45-78	55.2	492.00
PSACR	Pass	12	23.0	40.2	1.80	36	34.1	495.00	12	25.2	46.2	1.80	36	34.0	493.00
TCL	Info	36	16.2	25.2	1.61	44	32.8	471.00	44	19.1	45.0	4.30	44	32.6	466.00
ISL/TCL	Info	45	26.8	40.7	9.29	45	18.2	491.00	36	32.8	39.8	1.00	45	16.4	423.00

TestDataPro is a PC based results management software that comes standard with all models of TestPro. TestDataPro works in tandem with TestPro, which allows you to define projects and categorize test results into logical groupings once uploaded into the database. The database provides you with the ability to collaborate by viewing in-depth test details on-line as well as export results in .csv or .pdf format.

Options are available that allow you to combine an entire job worth of test results into a single .pdf document to pass along to a customer. Additionally, if you want to combine specific test results such as a Copper and Fiber certification tests, Multi-Gigabit and PoE test into a single Smart Building report, the flexibility in reporting allows you to customize the output to meet your specific needs.

CAT6A Channel Test Report



www.aem-test.com
customercare@aem-test.com



Technical Specifications

TESTPRO PLATFORM (All Versions)

Each platform in a kit comes with a certificate of Calibration traceable to NIST.

SIZE

- 200mm X 105mm X 50mm
- 7.87in X 4.13in X 1.97in

DISPLAY

- 5" TFT color touch screen, resolution 800 x 480 pixels

BATTERY

- Li-Ion
- 3.7V / 13,200 mAh
- 9 hr battery life typical

POWER ADAPTER

- 5V, 3A (supplied)
- 5-12V (supported)
- 2.1mm DC jack

PLATFORM OPERATING SYSTEM

- Linux

USB INTERFACES

- USB flash drive storage
- MicroUSB for connecting to PC

RJ-45 SIDE PORT

- 10/100/1G network connectivity test port

TEST ADAPTER TO PLATFORM INTERFACE

- High-frequency connector rated for 5000 insertion cycles
- Hot-swappable

MEASUREMENT ENGINE

- 9-channel dual-ended mixed-mode RF and DC measurement engine
- Industry's highest performance patent-pending measurement architecture for data cable testing

FREQUENCY RANGE

- 0.1 – 3,000 MHz

COPPER TESTING (K50, K60)

MEASUREMENT TIME

- CAT6A auto-test (including TCL and resistance unbalance tests): 6 sec
- CAT 8 Class II auto-test: 30 sec

WIREMAP

- All possible wire connection situations identified, as long as two wires are connected end-to-end on any pins

DC RESISTANCE

- Range: 0 to 50 Ω
- Pair-to-pair and within pair resistance unbalance measurement meets TIA 1152A specs

TONE GENERATOR

- 730Hz and 1440 Hz

DUAL-ENDED RF MEASUREMENTS IL, RL, NEXT, ACR-F, TCL

- All mandatory and optional RF measurements as per TIA and ISO/IEC standards
- Single-pair link testing license with supported length for dual ended testing greater than 1,000 m

LENGTH (PROPAGATION DELAY) MEASUREMENT

- Dual ended test: 0 – 600m with 0.1m resolution
- (0 – 6,000 nsec with 1 nsec resolution)
- Delay skew measurement with 1 nsec resolution

SUPPORTABLE CABLING

- 4-pair twisted pair cable
- 1-pair twisted pair cable
- Coax cable
- Optical cables (SM/MM pair)

TDR- RL

- 0-100 m (resolution: 1 m)
- Distance-to-fault

TDR- NEXT

- 0-100 m (resolution: 1 m)

IMPEDANCE

- 0-1000 Ω
- 0.1 Ω resolution in 90-110 Ω range

FIBER OPTIC (K11, K51, K61)

COMMON TO BOTH MM AND SM

- Supplied Test Interface: interchangeable FC on TX port and interchangeable LC on RX port

VFL LIGHT SOURCE

- Wavelength 650nm

VOLTMETER

- Measurement range: 0-60V DC

OPTICAL POWER METER

- Measurement range: -3 dBm to -30 dBm

SPECIFICATONS APPLICABLE TO AD-MM-01 MULTIMODE ADAPTER

WAVELENGTHS

- 850nm, 1300 nm

LIGHT SOURCE

- LED

TRANSMIT POWER

- -20 dBm typical

ENCIRCLED FLUX

- Compliant to IEC- 61280-4 and TIA-526-14-C-2015 as per supplier data sheet

LENGTH MEASUREMENT

- Range: up to 2 km (subject to maximum 10dB link loss)
- Length measurement resolution: 0.1m

DUAL ENDED LOSS

- Dual ended loss measurement: 0 to -10 dB

SPECIFICATIONS APPLICABLE TO AD-SM-01 SINGLEMODE ADAPTER

WAVELENGTHS

- 1310nm, 1550nm

LIGHT SOURCE

- Laser VCSEL

OPTICAL POWER

- -2dBm typical

LENGTH MEASUREMENT

- Length measurement range: up to 20 km (subject to maximum 20dB link loss)
- Length measurement resolution: 0.1m

DUAL ENDED LOSS

- Dual ended loss measurement: 0 to -20 dB

POWER OVER ETHERNET (K30, K60, K61)

- PoE source type detection
- Load test up to 90W
- Identification of PoE pairs
- Sustained load monitor

MULTI-GIGABIT ETHERNET (K30, K60, K61)

AUTO-TEST PARAMETERS

- Signal to Noise Ratio at each speed across each pair
- Cable diagnostics
- PoE detection

NETWORK TESTING

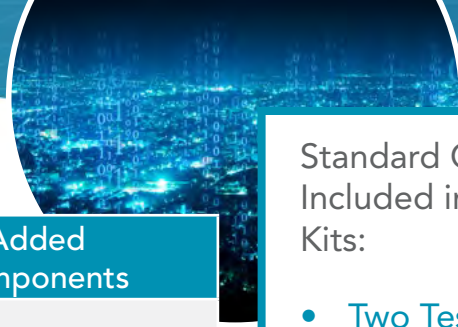
- Ethernet network discovery
- Traceroute
- Traffic generator
- Ping
- Wi-Fi: Identify SSID's and measure RSSI



Adapters and Accessories

TestPro is a highly versatile test platform that allows you to expand functionality as needed. Check with your sales representative or our website for a full list of optional adapters for MPTL, Patch Cord Certification, CAT8.2 TERA/GG45, Fiber Scope, PoE Load Test, Multi-Gigabit link speed up to 10GigE, and more.

TestPro Product Kits



Model Number	Description	Test Adapters Added with Standard Components
TESTPRO CV100-K11	Fiber Certification Kit	<ul style="list-style-type: none"> • Set of AD-SM-01 Adapters for Singlemode testing with FC/LC changeable connectors • Set of AD-MM-01 Adapters for Multimode testing with FC/LC changeable connectors • Two Sticklers 1.25 CleanClicker for LC/MU connectors • Certificate of calibration for fiber adapters • Soft Case for each AD-SM-01 and AD-MM-01
TESTPRO CV100-K50	Copper Certification Kit	<ul style="list-style-type: none"> • Set of AD-CAT6A-CH Adapters for testing of the Channel link • Set of AD-CAT6A-PL Adapters for testing of the Permanent Link • Hard Case • OP-CAT6A Software License
TESTPRO CV100-K51	Copper/Fiber Certification Kit	<ul style="list-style-type: none"> • Combines K50 and K11 Kits with Price Advantage* • Hard Case

Standard Components Included in All TestPro Kits:

- Two TestPro Platforms
- Certificate of Calibration for each TestPro
- USB Flash Drive with TestDataPro PC software
- Carrying Case/s
- Two Wiring Rack Hanging Straps
- Quick Start Guide
- USB Cable
- Two Power Adapters with Region-Specific Pins

* Price advantage takes into consideration overall cost including Extended Care coverage for all kit components vs. purchasing individually



Extended Care

Coverage is available in 1 and 3-year plans.

Extended care covers calibration service, test platform replacement or repair if damaged outside standard warranty, free yearly adapter replacement if damaged and other benefits.

TestPro CV100-51 Copper/Fiber Certification Kit



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