

## Power tools for network installation

*It's important to understand the role testing and verification play in the success of any Voice, Data, Video (VDV) installation.*

*Whether you're an electrical contractor just getting started in the growing VDV market, a home networking professional, a datacom specialist or IT/network manager, you'll find that the Fluke Networks MicroTools family of powerful VDV verification and troubleshooting tools will allow you to verify your work and deliver a quality installation.*

*When you choose MicroTools, you're getting award-winning products and superior support and programs from the leader in datacom network testing, Fluke Networks.*



# MICROSCANNER™ PRO

The Essential All-In-One Network Tester



The MicroScanner™ Pro is a powerful tool designed to prevent and solve cable and wire installation problems, allowing you to confirm continuity, wiring configuration and the location of cable faults, saving time and money at every installation. MicroScanner Pro tests both coaxial (RG6, RG59, etc., for CATV/CCTV) and all twisted-pair cable (UTP/STP/SSTP) and even troubleshoots other wiring like speaker wires, security networks or telephone cabling.

### Quickly identify problems

Using the MicroScanner Pro for verification ensures basic continuity and correct terminations. Use the **wiremap** test to check end-to-end continuity on all four-wire pairs to quickly verify if the cable under test has the correct wiring scheme (either 568A or 568B) and to identify any cabling problems. MicroScanner Pro quickly identifies a fault (*see Figure 1*), allowing you to see opens, shorts, crossed pairs, split pairs or any miswires.

# MICROSCANNER™ PRO

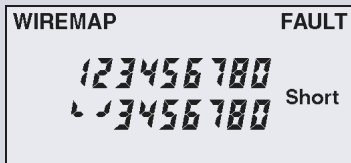


Figure 1. Pairs 1-2 are shorted.

What happens when a fault is detected? Time is often wasted with visual inspection. With the push of a button, MicroScanner Pro's **length** function uses Time Domain Reflectometry (TDR) to measure the full length of a cable. It determines whether the cable is open or shorted and tells you the distance to the fault. The length measurement is useful for billing and inventory purposes (even if it's on a spool). And, it displays individual pair lengths and tells you if the cable is

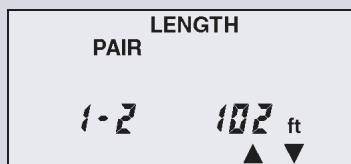


Figure 2. Showing 1-2 pair length.

connected to an active hub. And, MicroScanner Pro is the only cable tester in its class that uses TDR, giving you the most accurate length measurements.

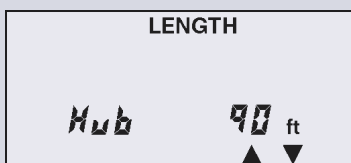


Figure 3. Active network hub detected at 90 ft.

## Identify active network connections

MicroScanner Pro's new active **network identification** mode flashes hub ports and shows you if a network tap is operating at 10 Mbps or 10/100 Mbps and whether it is full or half duplex capable. It also identifies workstations by displaying PC.



Figure 4. 10 Base-T signal detected, wired to PC.

## Toner function for tracing and locating cables

MicroScanner Pro's **Toner** function allows you to generate a tone for the optional MicroProbe to trace and locate hidden cabling in walls, ceilings or distributions boxes. And the MicroScanner Pro allows the user to generate four unique traceable tones to help identify users.

## Identify cabling links from the wiring closet

MicroScanner Pro also features the **Office/Room Identifier** function, which allows you to identify cabling drops for an office or room during adds, moves and changes. It helps determine routing at the patch panel and documents twisted

pair and COAX networks easily. Use the Office/Identifier Plugs (shown below) to attach to the far end of the link (at the workstation/office) and the MicroScanner Pro will display the office number on the display (see Figure 5).

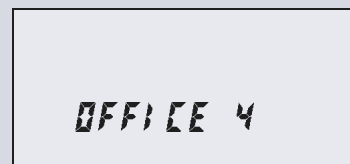


Figure 5. Office/Room #4 termination ID.

## Features

- Tests coaxial, UTP and STP cabling
- Uses Fluke Network's patented TDR technology to ensure accurate length measurements, including individual pair lengths to the hub
- Flashes hub light to help identify pairs
- Generates 4 unique tones for locating cables hidden in walls, ceilings, or wiring closets
- Identifies active networking 10Base-T/100Base-T hubs
- Checks wire configuration (wiremap)
- Pinpoints opens, shorts, crossed and split pairs
- Identifies half or full duplex capability
- Matches (UTP or coaxial) cables to offices during adds, moves and changes
- Enables patch cable testing without couplers or external adapters
- Pocket-sized and rugged
- One-year warranty

## MicroScanner Pro Accessories



Bare-wire Adapter  
(MT-8203-16)



Coax Adapter  
(MT-8203-15)



Wiremap Adapter  
(MT-8203-14)



Office Identifier Plugs  
(MT-8203-17)



Carrying Case  
(MT-8202-04)

**Specifications**

Product	Specs
<b>MicroScanner Pro</b>	<b>Dimensions:</b> 5.5" x 3.25" x 1" (139.7 x 82.5 x 25.4 mm)
	<b>Battery:</b> 9-volt alkaline battery; low battery indication
	<b>Display:</b> custom LCD, 1.75" x .85"
	<b>Applications:</b> shielded (STP) and UTP cable; 75 or 50 Ohm Coaxial cable; 10 Base-T or 10/100 Base-T networks
	<b>Main tester interface:</b> modular 8 connector for length, 10/100 link identification, wire map, office identifier, toner; loopback interface: module 8 connector used for patch cable wiremap
	<b>Length measurement:</b> measures length on all 4 pairs and displays in feet or meters; ±4% or ±2 ft whichever is greater, max length 1500 ft (457 m)
	<b>Length calibration:</b> user selectable NVP, NVP calculation based on known cable length (min. length 50 ft (15 m) and max. length 1500 ft (457 m)
	<b>Wiremap and Office/Identifier:</b> faults detected: Opens, Shorts, Reversed pairs, Swapped pairs, and Split pairs, distance maximum length: 656 ft (200M)
	<b>Office Identifier:</b> 6 passive test plugs attached to far end (identified as #1-3 and #5-7); distance maximum length 656 ft (200 mm)
	<b>Toner frequency:</b> user may select 1 Of 4 predefined tone sequences
<b>Wiremap Adapter</b>	<b>Toner Interface:</b> main Mod8 port for tone generation on all 4 pairs. Ground jack provided for grounding MicroScanner Pro during trace operations.
	<b>High voltage input/protection:</b> the test interface withstands input hazard conditions that arise from normal telephone interfaces (48 VDC at less than 80 mA) or 24 VAC power used to power many telephone keysets.
<b>Coax Adapter</b>	<b>Dimensions:</b> 2.25" x .5" x .625"
<b>MicroMapper</b>	<b>Dimensions:</b> 3" x .63" x .58"
	<b>Dimensions:</b> 4.93" x 2.05" x 1.18" (125 x 52 x 30 mm)
	<b>Weight:</b> 0.28 lbs (130 g)
	Minimum length for split pair detection is 2 ft (0.6 m)
	Testing of twisted pair cables over 656 ft (200 m) in length
<b>MicroNetBlink</b>	<b>Battery:</b> 6-volt alkaline battery; low battery indication by LED
	<b>Dimensions:</b> 4.53" x 2.49" x 1.03" (115 x 63 x 26 mm)
<b>MicroProbe</b>	<b>Weight:</b> 0.42 lbs (.19 kgs)
	<b>Battery:</b> 9-volt alkaline battery; low battery indication by LED
	<b>Dimensions:</b> 8.07" x 1.42" x 1.42" (205 x 36 x 36 mm)
<b>MicroMapper</b>	<b>Weight:</b> 0.26 lbs (110 g)
	<b>Battery:</b> 9-volt alkaline battery; low battery indication by LED

**Ordering Information**

Model Number	Items Included
<b>MT-8200-31</b>	<b>MicroScanner Pro</b> Includes: MicroScanner Pro, Wiremap Adapter, Coax Adapter (CATV type, F-connector), 9-volt Alkaline battery, and User Guide
<b>MT-8200-22</b>	<b>MicroScanner Pro Kit</b> Includes: MicroScanner Pro, wiremap adapter, coax adapter (CATV type, F-connector), office/room ID kit, carrying case, 9-volt alkaline battery, and User Guide
<b>MT-8200-45</b>	<b>MicroMapper</b> Includes: MicroMapper and MicroMapper Remote, patch cable, carrying case, 6-volt alkaline battery and User Guide
<b>MT-8200-48</b>	<b>MicroNetBlink Kit</b> Includes: MicroNetBlink, MicroProbe carrying case, 9-volt alkaline battery and User Guide
<b>MT-8200-47</b>	<b>MicroNetBlink</b> Includes: MicroNetBlink, 9-volt alkaline battery and User Guide
<b>MT-8200-46</b>	<b>MicroProbe</b> Includes: MicroProbe, 9-volt alkaline battery and User Guide

**Fluke Networks delivers Network SuperVision**

Fluke Networks offers the most comprehensive line of premises network testing tools for the inspection, verification, certification, and documentation of copper and fiber optic cabling systems. Network owners, installers and maintainers alike choose our products because they provide superior vision into their networks. From products that stay ahead of your technology needs, to responsive service to keep you up and running, Fluke Networks has everything you need to keep pace in today's fast moving networked world.

**MicroScanner Pro Accessories**

Model Number	Items Included
<b>MT-8202-04</b>	MicroScanner Pro Carrying Case
<b>MT-8203-15</b>	Coax Adapter
<b>MT-8203-17</b>	Office/Room ID Kit
<b>MT-8203-14</b>	Wiremap Adapter
<b>MT-8203-16</b>	Bare Wire Adapter

**NETWORK SUPERVISION**

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