

## Datasheet: IntelliTone™ Pro 200 LAN Toner and Probe Series

Every day, cabling installers and network technicians deal with the shortcomings of cable location tools based on 40-year-old technology. Until now.

The IntelliTone™ Pro 200 LAN Toner and Probe Series from Fluke Networks gives you cutting-edge digital and analog cable locating technologies that are as advanced as the systems you work with. IntelliTone is a breakthrough solution – and the only solution – that locates and isolates the most elusive, hidden or bundled voice, data and video cables and wire pairs quickly and reliably – even on active networks.



### Breakthrough digital and analog toning in one

IntelliTone™ Pro is the first toner and probe to offer digital and analog toning all in one tool. That means it's equipped with the most powerful cable location and verification technologies for any work environment – even active networks.

- Eliminates confusion over cable location; decisively rejects noise and false signals
- Locates the correct cable bundle
- Isolates a cable within the bundle, despite cable bleed
- Verifies twisted-pair installation with visual end-to-end continuity test (opens, shorts and reversed pairs)
- Identifies individual wire pairs with new SmartTone™ analog toning
- Simplifies signal interpretation in noisy environments with multiple LED indicators

### Locate cables quickly and easily

Fluke Networks has applied decades of cable test engineering expertise to the science of locating copper cables. The result is what we call IntelliTone technology – a digital signal-toning and signal-interpreting process that rapidly zeroes in on cables.

IntelliTone technology energizes cable conductors with a smart, synchronized digital signal. Multiple tone types occur in the signal that help you to:

- LOCATE the correct cable bundle using maximum radiation.
- ISOLATE a cable within the bundle using a signal with minimum radiation.
- VERIFY cable conductor continuity with an automated signal that steps through each conductor.

### Locate hidden cables

One of the toughest, most time-consuming parts of locating a cable has been in tracing its path amidst multiple cables and bundles in wiring closets. The IntelliTone digital signal features a LOCATE tone that provides maximum radiation, allowing you to quickly locate hidden and hard-to-find cabling.

## Isolate the right cable or pair – fast

Cabling installations have become increasingly complex, which has made cabling increasingly difficult to locate with traditional technologies.

When cables are run together for even short lengths, a signal from one can bleed over to another. One cable might carry the original signal; other cables might carry the signal as a result of bleed. Isolating cables with traditional tools requires guesswork, training, time for repeated testing – and even the best efforts often result in mistakes.

IntelliTone Pro provides two cutting-edge technologies to isolate cables or wire pairs. Digital mode can be used to isolate twisted-pair cables on a switch or within a bundle. SmartTone™ analog mode can be used to isolate wire pairs at an unterminated outlet.

## Overcome noise – and save hours of time

Fluorescent lights, machinery, computer monitors and electrical wiring all produce noise that slows down cable location. Together, the IntelliTone Pro Toner's synchronized digital signal and the IntelliTone Pro Probe's microprocessor controlled signal identification technology reject noise and false signals to clearly identify cable location. This can save you hours every week on cable location projects.

## Tone on live networks safely and effectively

Modern network devices use common mode termination for cables connected to their ports. This reduces noise and crosstalk in the cable; but, it can also absorb a traditional toner signal. Unlike traditional signals, the IntelliTone digital signal stays strong despite common mode termination. And the IntelliTone Pro 200 LAN Toner automates toning individual cable conductors, making it quick, efficient and safe to locate cables on active networks.

## Verify conductor continuity with cablemap

Eliminate callbacks during cabling moves, adds and changes with the powerful diagnostic capabilities of IntelliTone™ Pro 200 LAN. The IntelliTone Pro 200 Probe features a Cablemap capability that identifies common cable miswires in twisted pair cabling. IntelliTone technology automates the testing of each conductor for end-to-end continuity; LED lights and tones clearly indicate miswires.

## Identify and troubleshoot cable services

**Service** – Is the RJ45 jack a datacom jack, or a dead jack? IntelliTone Pro 200 LAN Toner LEDs clearly identify common datacom services found on today's networks including 10/100/Gigabit Ethernet links.

**Continuity** – Once you've located a cable, the next step is to verify cable conductor continuity. IntelliTone Pro 200 LAN Toners make it easy – eliminating the need for a separate diagnostic tool.



## IntelliTone Pro 200 LAN Features

### 200 LAN Toner

1. **IntelliTone provides robust toning into active network equipment** while eliminating cable misidentification due to bleed
2. **Banana jacks** allow you to use only the leads you need and facilitates easy replacement
3. **One tool supports all VDV cable types** (RJ45, RJ11, coax, and bare wire)
4. **Test cable continuity**, eliminating need for separate diagnostic tool
5. **Precisely isolate wire pairs** with built-in SmartTone analog toning
6. **Tone active networks safely and effectively** with IntelliTone digital mode
7. **Identify resistance** and if digital tone or analog tone function is operational
8. **Identify and diagnose Ethernet link connectivity** with NIC/hub indication
9. **Cable termination** indicator identifies if cable is connected or not
10. Knob provides **simple, task oriented operation**



### 200 Probe

1. **Multiple-level LEDs** simplify signal interpretation in noisy environments. Visually steps through wiremap tests
2. **SYNC indicates detection of IntelliTone signal** and shows battery status at power-up

**Choose between two digital detection modes:**

3. **Digital detection mode:** lets you locate cables at a distance
4. **Digital detection mode:** lets you isolate cables in bundles or at patch panels
5. Analog mode used to **isolate individual wire pairs** with SmartTone
6. **Test cable continuity** – eliminating need for separate diagnostic tool
7. **Time-saving thumbwheel** lets you select desired toning mode on the probe rather than toner
8. **Plug** works with CableMap function – eliminating the need for a separate wiremap tool

## Toner and Probe shared features:

IntelliTone digital technology with advanced signal processing provides **high-resolution measurement**

**Auto-Off feature:** The toner turns off automatically after 2.5 hours of inactivity. Probe turns off after 1 hour of inactivity

**SmartTone™ analog technology:** IntelliTone Pro Toners generate four different analog songs which alternate every time the pair under test is shorted; IntelliTone Pro Probes detect this tone or any other analog signal from other testers

**Battery status:** 3-level battery status indicator LEDs on the toner and probe light for one second at power on

## Specifications

| General                                                    |                                                                                                                                                                                               |
|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating temperature                                      | 32 °F to 104 °F (0 °C to 40 °C)                                                                                                                                                               |
| Storage temperature                                        | -4 °F to +140 °F (-20 °C to +60 °C)                                                                                                                                                           |
| Operating relative humidity<br>(% RH without condensation) | 95% (50 °F to 95 °F; 10 °C to 35 °C)<br>75% (95 °F to 104 °F; 35 °C to 40 °C)<br>Uncontrolled < 50 °F (< 10 °C)                                                                               |
| Vibration                                                  | Random, 2 g, 5 Hz – 500 Hz                                                                                                                                                                    |
| Shock                                                      | 1 m drop test with and without module                                                                                                                                                         |
| Safety                                                     | IEC 61010 Category: None                                                                                                                                                                      |
| Altitude                                                   | 3000 m                                                                                                                                                                                        |
| EMC                                                        | EN 61326-1                                                                                                                                                                                    |
| Battery type and life                                      | 9 V alkaline (NEDA 1604A or IEC 6LR61); 20 hours typical                                                                                                                                      |
| Applications                                               | Copper cabling media, including shielded (STP) and UTP cable; 75 or 50 Ohm coaxial cable; two conductor control, security, generic cabling. 10 Base-T or 10/100/1000 Base-T datacom networks. |

| Toner           |                                                                                                                                                       |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimensions      | 5.54 in x 2.94 in x 1.25 in (14.1 cm x 7.5 cm x 3.2 cm)                                                                                               |
| Display         | LED                                                                                                                                                   |
| Control         | Thumbwheel switch                                                                                                                                     |
| Toner interface | Main Mod8 port for tone generation on all 4 pairs of UTP / STP cabling, F connector for coaxial cabling, Banana jack plugs (2) - two conductor wiring |
| Toner frequency | IntelliTone™ signal: encoded digital signal Analog SmartTone signal: 500-1200Hz, 4 Songs                                                              |
| Output power    | 5 V p-p                                                                                                                                               |
| Auto power down | Turns off automatically after 2.5 hours of inactivity                                                                                                 |



| Probe           |                                                                                                                                               |  |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Dimensions      | 8.73 in x 1.88 in x 1.26 in (22.2 cm x 4.8 cm x 3.2 cm)                                                                                       |                                                                                     |
| Display         | (8) LED indicators, Synch LED indicator                                                                                                       |                                                                                     |
| Audio           | IntelliTone: Microprocessor controlled audio files, Analog: Detected toner signal                                                             |                                                                                     |
| Control         | Thumbwheel switch, volume control wheel                                                                                                       |                                                                                     |
| Tone detection  | Detects IntelliTone™ digital signal for Locate, Isolate and CableMap<br>Detects Analog SmartTone Signal (500-1200Hz) and other analog toners. |                                                                                     |
| Toner interface | Main Mod8 port for cablemap on all four pairs of UTP / STP cabling                                                                            |                                                                                     |
| Auto power down | Turns off automatically after one hour of inactivity                                                                                          |                                                                                     |

## Ordering Information

| Model Number                                | Items Included                                                                                                                                                                                                                                   |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MT-8200-60-KIT                              | <b>IntelliTone Pro 200 LAN Kit</b><br>Includes IntelliTone Pro 200 LAN Toner and 200 Probe, coax F connector adapter, two RJ11 and two RJ45 patch cables, test leads with alligator clips, lanyards, quick start guide, and two 9 volt batteries |
| MT-8200-61-TNR                              | IntelliTone Pro 200 LAN Toner                                                                                                                                                                                                                    |
| MT-8200-63A                                 | IntelliTone Pro 200 Probe                                                                                                                                                                                                                        |
| IntelliTone Pro Toner and Probe Accessories |                                                                                                                                                                                                                                                  |
| MT-8202-05                                  | IntelliTone Pro Case                                                                                                                                                                                                                             |
| MT-8203-20                                  | Test Leads with Bed of Nails                                                                                                                                                                                                                     |
| MT-8203-22                                  | Test Leads with Alligator Clips                                                                                                                                                                                                                  |

## IntelliTone Pro 200 LAN Kit

- Finds the cables the others can't
- IntelliTone digital signal processing rejects noise and false signals
- SmartTone analog signal precisely isolates individual wire pairs
- Tones safely and clearly on active networks
- Tests for continuity
- Identifies and diagnoses 10/100/1 Gb Ethernet link connectivity with NIC/hub indication
- Verifies twisted-pair installation with CableMap capability which identifies common cable miswire