TrueLength™ Cable Length Meter

Key Features

- **Measures distance to opens or shorts**
- **Operation modes: AWG/mm/mm², Telco, Network, Coax, Tone Generator, and Ohms**
- **Measures single or dual (pair) conductor length in feet or meters**
- **Provides audible indicator for shorted wires**
- **Large LCD for easier reading in sunlight**
- **Measures copper or aluminum wires 8 to 30 AWG (3.264 to 0.255 mm, 8.366 to 0.051 mm²)**
- **High voltage protection**
- **Opens/capacitance measurement 5,000 feet at 15 pF/ft**
- **Shorts/resistance 0-635 Ω**
- **12 programmable wire gauge settings**
- **9 V battery operation**

Applications

- Troubleshoot new or existing lines by measuring distance to shorts or opens, and shorts between lines
- Trace wires by generating up to four trace tones
- Manage cable inventory by measuring length on spools
- Determine if wire length on spools is adequate

The TrueLength cable length meter provides an easy-to-use, versatile, and compact handheld tester for measuring cable length or for use as a tone generator. TrueLength is ideal for electrical contractors, datacom contractors and installers, and service provider technicians. It works on virtually any single or two conductor cables, and it lets users find and repair existing cable problems or verify new installations quickly. TrueLength helps technicians keep track of cable inventory in the field or warehouse and to determine wire needs quickly. It includes 12 pre-set and 12 user-programmable wire gauge settings and offers four selectable tones when in tone generation mode. It measures resistance at 0 to 635 Ω and opens/capacitance 45 pf to 0.082 uf.

Compliance

- CE certified

Tone generation capability

Measure length in AWG, mm, or mm² mode

Measure network, telco, or coax cable

Specifications

Physical

Size

3.3 x 7.6 x 15.2 cm
(1.3 x 3.0 x 6.0 in)

Weight

326 g (11.5 oz) with battery and test leads

Environmental

Operating temperature	0 to 50℃
	(32 to 122°F)
Storage temperature	−10 to 60℃
	(14 to 140°F)
Humidity	10 to 90%, non-condensing

Battery Life

Based on a typical 9 V alkaline battery:

Standby	2.5 yrs
Cable testing	20 hrs into 60 Ω load
	(Note: Smaller resistance loads will result in shorter battery life)

Cable Types

Single or dual conductor, AWG8 – AWG30 (3.264 to 0.255 mm, 8.366 to 0.051 mm²), network cabling, coax, and telco

Ordering Information

Description	Ordering Number
TrueLength cable length meter (requires one 9 V battery [not included])	CLM400
Replacement double banana to BNC and BNC to F jack (banana to F-jack assembly)	TP75
Replacement cord set and clips for CLM400	TP76
Pouch for CLM400	PC500

Distance to Opens/Capacitance: Max 0.082 uf

Wire Type	Typical Capacitance (per foot)	Length	Tolerance
Telecom	17.5	0 to 1371 m (0 to 4500 ft)	Min. cable length 0.91 m (3 ft) ±2% + 3 digits LSD
Network wire	15	0 to 1524 m (0 to 5000 ft)	Min. cable length 0.91 m (3 ft) ±2% + 3 digits LSD
Coax	22	0 to 1066 m (0 to 3500 ft)	Min. cable length 0.91 m (3 ft) ±2% + 3 digits LSD

Distance to Shorts/Resistance: 0 to 635 Ω

AWG	Minimum (feet)	Length	Tolerance
8, 10	5.0	0 to 3047 m (0 to 9999 ft)	±2% + 3 digits LSD
12, 14, 16	4.0	0 to 3047 m (0 to 9999 ft)	±2% + 3 digits LSD
18, 20, 22	3.0	0 to 3047 m (0 to 9999 ft)	±2% + 3 digits LSD
24, 26, 28	1.0	0 to 3047 m (0 to 9999 ft)	±2% + 3 digits LSD
30	1.0	0 to 1792 m (0 to 5879 ft)	±2% + 3 digits LSD

LSD Least Significant Digit

Test & Measurement Regional Sales