



## Fluke 421D, 416D and 411D Laser Distance Meters



### Technical Data

**Professional-grade distance measuring tools that are fast, easy to use, and fit in your pocket.**

The Fluke laser distance meters use the most advanced distance measuring technology. These meters are fast, accurate, durable, and easy to use—just point and shoot. Their simple design and easy one-button operation means you spend less time measuring while increasing the reliability of the answers that you need.

The compact and handy Fluke laser distance meters were designed for indoor and limited outdoor applications. All three models are simple to operate, with the Fluke durability and quality you expect. And, with shortcut keys for addition, subtraction, area, and volume, measurements could not be simpler.

The extra bright laser is clearly visible so you can always see your targeting point even if the target object is in a hard-to-reach spot, or a long distance away. These units have a large LCD screen and buttons positioned for one-handed measurements.

Laser distance meters also display temperature in Metric units (i.e. meters and millimeters)

### Features and benefits

#### All meters offer:

- Reduction of estimation errors, saving both time and money
- The most advanced laser technology for distance measurement
- Instant measurement with one-button operation
- Easy targeting with bright laser
- Quick calculation of area (square footage) and volume
- Easy addition and subtraction of measurements
- Improved battery life from automatic shut-off feature
- Pythagoras calculation for determining distance indirectly from two other measurements
- Pouch with Fluke logo
- Two-year warranty

#### The 421D and 416D additionally offers:

- Improved visibility with backlit, three-line display
- Ability to measure up to 60 m (200 ft) for 416D, 100 m (330 ft) for 421D
- Enhanced Pythagoras calculation for determining distance indirectly from three other measurements
- Audible feedback of on and off modes
- Storage of the last ten measurements (416D), and twenty measurements (421D), for quick recall of distance
- Minimum and Maximum function
- Strong environmental protection with IP54 (water spray and dust proof) sealing

#### The 421D additionally offers:

- Audible feedback for taking incremental measurements
- ± 45° Tilt sensor for taking indirect measurements in hard to reach areas
- Tripod mode allows you to mount to a tripod for measuring long distances
- Built in light sensor for activating the backlight saving battery life
- Corner angle feature, allows you to determine the angle of a corner

## General specifications

Technical specifications	Fluke 411D	Fluke 416D	Fluke 421D
Range (for extended distances, use a target plate)*	0.1 m to 30 m (0.33 ft to 100 ft)	0.05 m to 60 m (0.16 ft to 200 ft)	0.05 m to 100 m (0.16 ft to 330 ft)
Measuring accuracy**	± 3 mm (0.118 in)	± 1.5 mm (± 0.059 in)	± 1.5 mm (± 0.059 in)
Laser class	II	II	II
Laser type	635 nm, < 1 mW	635 nm, < 1 mW	635 nm, < 1 mW
Automatic power off	after 180 seconds	after 180 seconds	After 180 seconds
Continuous measurement	•	•	•
Addition/subtraction	•	•	•
Battery life	up to 3,000 measurements	up to 5,000 measurements	up to 5,000 measurements
LCD illumination	—	•	•
Data locations	—	10	20
Min/Max	—	•	•
Audible feedback	—	•	•
Pythagoras (Indirect measurement)	Simple	Full	Full
Room angle and stakeout	—	—	•
±45° Tilt sensor/ indirect measure	—	—	•
Ingress protection	IP40	IP54	IP54
Dimensions	123 mm x 50 mm x 26 mm (4.84 in x 1.97 in x 1.02 in)	135 mm x 46 mm x 31 mm (5.31 in x 1.81 in x 1.22 in)	127 mm x 52 mm x 29 mm (5.00 in x 2.06 in x 1.13 in)
Weight	150 g (5.29 oz)	110 g (3.88 oz)	125 g (4.40 oz)
Temperature range			
Storage	-25 °C to 70 °C (-13 °F to 158 °F)	-25 °C to 70 °C (-13 °F to 158 °F)	-25 °C to 70 °C (-13 °F to 158 °F)
Operation	0 °C to 40 °C (32 °F to 104 °F)	0 °C to 40 °C (32 °F to 104 °F)	0 °C to 40 °C (32 °F to 104 °F)
Operating altitude (ISO 9022)	up to 3500 m	up to 3500 m	up to 3500 m
Storage humidity (at 35 °C)	maximum 85 % for 24 h	maximum 85 % for 24 h	maximum 85 % for 24 h
Batteries	AAA (2)	AAA (2)	AAA (2)

\* In favorable conditions (optimal target surface, room temperature) up to 10 m (33 ft). In unfavorable conditions, such as intensive sunshine, very weakly reflecting target surface, or large temperature fluctuations, measuring accuracy may deteriorate to approx. ± 0.25 mm/m (± 0.003 in/ft) for distances above 10 m (33 ft).

\*\* In favorable conditions (optimal target surface, room temperature) up to 10 m (33 ft). In unfavorable conditions, such as intensive sunshine, very weakly reflecting target surface, or large temperature fluctuations, the deviation over distances 10 m (33 ft) can increase by approx. ± 0.15 mm/m (± 0.0018 in/ft).

## Why use a distance meter?

**Reduce measuring time:** Instant measurements with the touch of a button.

**Quickly measure long distances:** Measure up to 100 m (330 ft), easier, and more accurately than with a tape measure.

**Increase measuring accuracy:** Get accuracy up to 1.5 mm (1/16 in), eliminating any guesswork.

**One-person measuring:** With a laser, there is no need for a second person.

**One-handed operation:** Laser measuring devices are easily operated with one hand.

**Safety:** A laser measuring device allows you to measure areas you may not be able to safely access.

**Obtain difficult measurements:** Easily measure inside a false ceiling.

**Determine square footage and volume:** Automatic calculation of area (square footage) and volume, with the touch of a button.

For more information visit [www.fluke.com/101uses](http://www.fluke.com/101uses)



## Ordering information

Fluke 421D Laser Distance Meter  
 Fluke 416D Laser Distance Meter  
 Fluke 411D Laser Distance Meter

All models include: Laser Distance Meter, Two AAA batteries, Users manual on CD, Quick Start Guide, Nylon carrying case, and Two-year warranty

**Fluke. Keeping your world up and running.®**

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