

Fluke 424D, 419D and 414D 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 specific function buttons, different tasks can be completed quickly and easily.

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.

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
- Minimum/maximum function
- Improved battery life from automatic shut-off feature
- Pythagoras calculation for determining distance indirectly from two other measurements
- Pouch with Fluke logo
- Three-year warranty



Fluke 414D, 419D and 424D Laser Distance Meters.

The 424D and 419D additionally offers:

- Improved visibility with backlit screen
- Ability to measure up to 80 m (260 ft) for 419D, 100 m (330 ft) for 424D
- Tripod mode allows you to mount to a tripod for measuring long distances
- Stake out function
- Enhanced Pythagoras calculation for determining distance indirectly from three other measurements
- Audible keypad feedback
- Storage of the last twenty measurements for quick recall of distance
- Strong environmental protection with IP54 (water spray and dust proof) sealing

The 424D additionally offers:

- Inclination sensor for taking measurements in hard to reach areas
- Compass provides a “heading” for distance measurement
- Automated endpiece correction: when measuring from an edge or corner, a built-in sensor detects the position of this bracket and automatically changes the reference point

General specifications

	414D	419D	424D
Distance measurement			
Typical measuring tolerance ^[1]	± 2.0 mm ^[3]	± 1.0 mm ^[3]	
Maximum measuring tolerance ^[2]	± 3.0 mm ^[3]	± 2.0 mm ^[3]	
Range at Leica target plate GZM26	50 m/165 ft	80 m/260 ft	100 m/330 ft
Typical range ^[1]	40 m/130 ft	80 m/260 ft	80 m/260 ft
Range at unfavorable condition ^[4]	35 m/115 ft	60 m/195 ft	60 m/195 ft
Smallest unit displayed	1 mm /1/16 in	1 mm /1/32 in	
Power Range Technology™	no	yes	yes
∅ laser point at distances	6/30/60 mm (10/50/100 m) 0.23/1.18/2.36 in (32.8/164/330)	6/30/60 mm (10/50/100 m) 0.23/1.18/2.36 in (32.8/164/330)	
Tilt measurement			
Measuring tolerance to laser beam ^[5]	no	no	± 0.2°
Measuring tolerance to housing ^[5]	no	no	± 0.2°
Range	no	no	360°
General			
Laser class	II		
Laser type	635 nm, < 1 mW		
Protection class	IP40	IP54	
Automatic laser off	After 90 seconds		
Automatic power off	After 180 seconds		
Battery life (2 x AAA) 1.5 V NEDA 24A/IEC LRO3	up to 3,000 measurements	up to 5,000 measurements	
Size (HxWxD)	116 mm x 53 mm x 33 mm (4.56 in x 2.08 in x 1.29 in)	127 mm x 56 mm x 33 mm (5 in x 2.20 in x 1.29 in)	127 mm x 56 mm x 33 mm (5 in x 2.20 in x 1.29 in)
Weight (with batteries)	113 g (3.98 oz)	153 g (5.39 oz)	158 g (5.57 oz)
Temperature range:	Storage -25 °C to +70°C (-13 °F to +158 °F) Operation 0 °C to +40 °C (32 °F to +104 °F)	-25 °C to +70°C (-13 °F to +158 °F) -10 °C to +50 °C (14 °F to +122 °F)	
Calibration cycle	Not applicable	Not applicable	tilt and compass
Maximum altitude	3000 m	3000 m	3000 m
Maximum relative humidity	85 % at 20 °F to 120 °F (-7 °C to 50 °C)	85 % at 20 °F to 120 °F (-7 °C to 50 °C)	85 % at 20 °F to 120 °F (-7 °C to 50 °C)
Safety	CAN/CSA-C22.2 No. 61010-1-04, UL Std. No. 61010-1 (2nd Edition), ISA-82.02.01, IEC Standard No. 61010-1:2001, EN60825-1:2007 (Class II)		
EMC	61326-1:2006		

[1] Applies for 100 % target reflectivity (white painted wall), low background illumination, 25 °C (13 °F).
 [2] Applies for 10 % to 500 % target reflectivity, high background illumination, -10 °C to +50 °C (14 °F to +122 °F).
 [3] Tolerances apply from 0.05 m to 10 m (0.001 ft to 32.8 ft) with a confidence level of 95 %. The maximum tolerance may deteriorate to 0.1 mm/m (0.003 in/ft) between 10 m to 30 m (32.8 ft to 98.4 ft) and to 0.15 mm/m (0.005 in/ft) for distances above 30 m (98.4 ft).
 [4] Applies for 100 % target reflectivity, background illumination between 10'000 lux and 30'000 lux.
 [5] After user calibration. Additional angle related deviation of ± 0.01° per degree up to ± 45° in each quadrant. Applies at room temperature. For the whole operating temperature range the maximum deviation increases by ± 0.1°.

Ordering information

Fluke 424D Laser Distance Meter
 Fluke 419D Laser Distance Meter
 Fluke 414D Laser Distance Meter

All models include: Laser distance meter, two AAA batteries, users manual on CD, quick reference guide, vinyl carrying pouch, and three-year warranty

Why use a distance meter?

- Instant measurements up to 100 meters/330 feet.** Just point, click, done.
- Measure with greater accuracy.** Up to ± 1 mm. No scales to interpret or misread.
- Do the work of two.** Instead of holding the tape, your helper can do other jobs.
- Speed up the job.** Easily measure hard-to-access areas, like high ceilings, without climbing a ladder.
- Keep it on the level.** New inclination sensor on the Fluke 424D helps with leveling, height tracking, and measuring around obstacles.
- Reduce estimating errors—let the meters do the math.** Find area and volume. Easily add and subtract distances. Use Pythagoras calculations for height.
- Trust Fluke tools.** Rugged and reliable, dust- and splash-proof, you can work indoors and out with confidence, because they're Fluke tools.

For more information visit www.fluke.com/distance

Fluke. Keeping your world up and running.®

Fluke Corporation
 PO Box 9090, Everett, WA USA 98206

Fluke Europe B.V.
 PO Box 1186, 5602 BD
 Eindhoven, The Netherlands

For more information call:
 In the U.S.A. (800) 443-5853 or
 Fax (425) 446-5116
 In Europe/M-East/Africa (31 40) 2 675 200 or
 Fax (31 40) 2 675 222
 In Canada (800)-36-FLUKE or
 Fax (905) 890-6866
 From other countries +1 (425) 446-5500 or
 Fax +1 (425) 446-5116
 Web access: <http://www.fluke.com>

©2007-2012 Fluke Corporation.
 Specifications subject to change without notice.
 Printed in U.S.A. 4/2012 3028711E D-EN-N

Modification of this document is not permitted without written permission from Fluke Corporation.

Spring 2014

FLUKE®

FLUKE SPECIALS

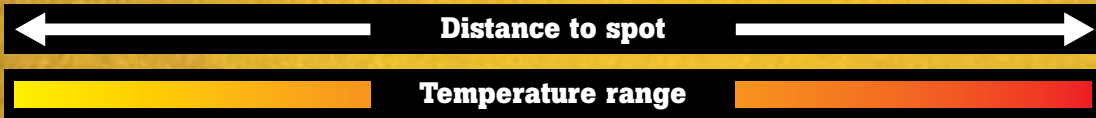
**Visual IR
Thermometer
Fluke VT04**

**Special promotions
on all Fluke Multifunction
Installation Testers**



The Most Trusted Tools in the World.

Temperature solutions: fit for your job, fit for your pocket



Hot/cold markers



**Fluke 62MAX
Fluke 62MAX+**

Fluke 561

**Fluke 566
Fluke 568**

Fluke 572-2

**Fluke VT04
Fluke VT02**

- Min/max/avg/dif
- Dust/water resistant (IP54)

- Combined IR + contact
- HVAC applications

- Data logging
- Combined IR + contact

- Data logging
- Hi/Lo alarm
- Min/max/avg/dif
- IR + contact

- Image storage
- Analysis software

NEW PRICES!

	Exact spot positioning						Heat map	
Features	62MAX	62MAX+	561	566	568	572-2	VT02	VT04
	Infrared thermometer		Multipurpose thermometer			High temperature infrared thermometer	Visual IR thermometer	
Temperature range	-30 to 500 °C	-30 to 650°C	-40 to 550 °C	-40 to 650 °C	-40 to 800 °C	-30 to 900 °C	-10 to 250 °C	-10 to 250 °C
D:S	10:1	12:1	12:1	30:1	50:1	60:1	6:1	9:1
Laser sighting	Single laser	Dual laser	Single-point laser	Single-point laser	Single-point laser	Offset dual laser	No laser necessary	No laser necessary
	£ 84	£ 100	£ 131	£ 339	£ 429	£ 515	£ 395	£ 595



Fluke CNX™ Wireless Test Tools. Safer. Easier. Faster.



Use Wirelessly



Use as stand alone



Use as data logger

Your tools - connected.

Take readings quicker. Solve problems faster. Fluke CNX™ wireless test tools work together to help you troubleshoot faster. With the CNX™ team, measurements are:

- Remote
- Simultaneous
- Recordable

Connect any of the CNX™ Modules to your test point, and view the results up to 20 meters away on the CNX™ Wireless Multimeter. You'll save time, with less run-around collecting multiple measurements.



Fluke CNX i3000
iFlex™ AC Current Clamp
£ 129

Fluke CNX 3000
Wireless Multimeter
£ 259



Fluke CNX t3000
K-type Temperature
£ 109



Fluke CNX v3000
AC Voltage
£ 109



Fluke Ti100 series
Thermal Imager
From £ 1650



Fluke CNX a3000
AC Current Clamp
£ 109



Fluke CNX pc3000
PC adapter
£ 39

Fluke 6200-2 and 6500-2 Portable Appliance Testers

NEW

Perform more tests each day! The low weight, small size, one-touch solutions.

Improved auto-test capabilities to help you increase the number of tests completed each day. Designed to work faster without compromising safety – yours or your customer's.

- 'One-touch' testing: dedicated key per test
- Save time: pre-set pass/fail levels
- Easy reading: large backlit display
- Rapid data entry: integral keyboard
- Back-up data storage and transfer: additional USB memory drive
- Pre-set, auto-test sequences

NEW colour Dot Matrix Display:

Superior visibility and viewing angle

NEW 250V Insulation Test

NEW 110V Test Functionality

NEW RCD Test

Optional accessories:

- DMS 0702/PAT software
- SP-SCAN-6000 barcode scanner
- SP6000 printer

Also available as a kit.



Fluke 6200-2

£ 873



Fluke 6500-2

£ 1244

Fluke TestGuide

The NEW TestGuide app shows electricians in short and clear steps what the actions are for the most common measurements, what to look at and how to interpret the results. You will also find background articles and in-depth application notes which can be downloaded or send to your email.

Free Download!

www.fluke.co.uk/testguide



NEW



Special promotions New Fluke Multifunction Installation Tester Kits

PROMOTION

Fast, lightweight, easy to use, robust and reliable installation tester.
Now all models with great offers!

- Fast high current loop test
- Reliable 3-wire loop test
- No complex multi-level menus: rotary dial clearly indicates selected function
- Easy test lead compensation: Zero adapter
- Extended memory*
- mΩ resolution: loop & line resistance*
- Variable RCD current mode for customised settings
- Test smooth DC sensitive RCDs*
- PASS/FAIL indication for RCD tests

Fluke 1652C / Fluke T110 kit



**Fluke 1652C +
FREE T110**

Now with **FREE Cabinet key****



**Fluke 1652C-
TPOLEKIT
£ 947**

Fluke 1653B / Software / Fluke T130 kit



**Fluke 1653B +
FREE Software & T130**

Now with **FREE Cabinet key****




**Fluke 1653B-
TPOLEKIT/D
£ 1159**

Fluke 1654B / Software / Fluke T150 kit



**Fluke 1654B +
FREE Software & T150**

Now with **FREE Cabinet key****



**Fluke 1654B-
TPOLEKIT/D
£ 1293**

* 1654B only

** Free Cabinet key offer valid until 30.06.2014, only available direct from Fluke by using special offer voucher, proof of purchase required. Go to www.fluke.co.uk/promotions to download the voucher and view full terms and conditions or contact Fluke directly.

Fluke Clamp Meters: Readings you can rely on

True RMS

Wire in tight spaces - panels out of reach - extra large conductors.
Noise free measurements for every workspace.



Fluke iFlex™
£ 89



Now with **FREE 2AC VoltAlert***



	Fluke 365	Fluke 323	Fluke 324	Fluke 325	Fluke 373	Fluke 374	Fluke 375	Fluke 376
Jaw opening	18 mm	30 mm	30 mm	30 mm	32 mm	34 mm	34 mm	34 mm
Current AC TRMS	200 A	400 A	400 A	400 A	600 A	600 A	600 A	1000 A
Current DC	200 A	-	-	400 A	-	600 A	600 A	1000 A
Voltage AC	600 V	600 V	600 V	600 V	600 V	600 V	600 V	1000 V
Voltage DC	600 V	600 V	600 V	600 V	600 V	600 V	600 V	1000 V
Continuity	●	●	●	●	●	●	●	●
Resistance	●	●	●	●	●	●	●	●
Capacitance	-	-	●	●	●	●	●	●
Frequency	-	-	-	●	-	-	●	●
Contact temperature	-	-	-10 ... 400°C	-10 ... 400°C	-	-	-	-
In-rush	-	-	-	-	●	●	●	●
i-Flex	-	-	-	-	-	optional	optional	included (18")
Price	£ 199	£ 99	£ 118	£ 159	£ 176	£ 265	£ 317	£ 379

FREE 2AC *

* Free 2AC offer valid until 30.06.2014, only available direct from Fluke by using special offer voucher, proof of purchase required. Go to www.fluke.co.uk/promotions to download the voucher and view full terms and conditions or contact Fluke directly.



Check our **NEW**
electrician's toolbelt page!
www.fluke.co.uk/toolbelt

Earth ground testing

Simpler and Faster.

The Fluke 1623-2 and 1625-2 earth ground testers are accurate, safe and very easy to use. Perform basic earth ground tests up to the most advanced tests. Several test methods provide quick and precise impedance measurements:

- 3-and-4-pole Fall-of-Potential
- 2-pole
- selective
- stakeless

NEW USB Data Storage and transfer
NEW larger display:

Automatic Frequency Control (AFC)

NEW world class accessories:

- Easy to use reels
- Heavy-duty stakes
- Colour coded wires (faster set up)



Fluke 1623-2
£ 999



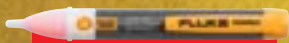
Fluke 1625-2
£ 1599

NEW

Fluke 110 series Digital Multimeters

Economic investment in accuracy, simple operation for easy and fast measurements.

PROMOTION



Now with **FREE 2AC VoltAlert***



3 Years Warranty!
Keep your Fluke meter up and running

True RMS

	Fluke 113	Fluke 114	Fluke 115	Fluke 116	Fluke 117
True RMS readings	●	●	●	●	●
Display backlight	●	●	●	●	●
VoltAlert™, Non-contact voltage detection	-	-	-	-	●
Built-in thermometer (probe included)	-	-	-	●	-
LoZ (low input impedance)	-	●	-	●	●
Microamps to test flame sensors	-	-	-	●	-
Frequency, capacitance, Diode test	-/●/●	-	●/●/●	●/●/●	●/●/●
Recommended AC current clamp**	-	i200s	i200s	i200s	i200s
Recommended pouch	C25	C25	C25	C25	C25
CAT III	600V	600V	600V	600V	600V
Price	£ 109	£ 128	£ 151	£ 174	£ 180
			FREE 2AC *		FREE 2AC *

* Free 2AC offer valid until 30.06.2014, only available direct from Fluke by using special offer voucher, proof of purchase required. Go to www.fluke.co.uk/promotions to download the voucher and view full terms and conditions or contact Fluke directly.

** for AC current 1 - 200 A

PLAY AND WIN!

Play the Electrician Game and win rugged and innovative Fluke tools!

www.fluke.co.uk/game



Laser Distance Meters

Fluke laser distance meters will become the next essential item on your toolbelt.



Fluke 414D £ 99
Fluke 419D £ 185
Fluke 424D £ 283

VoltAlert™

When the tip of the Fluke VoltAlert AC voltage detector glows red and the unit beeps, you know there is voltage on the line.



Fluke 2AC
£ 19

Two Pole Testers from Fluke

Robust,
 easy, fast
 and safe.



Fluke T150
£ 109

Fluke T130
£ 89

Fluke T110
£ 56

Fluke T90
£ 37

T5/H5/1AC Kit

- Fluke T5-1000 Electrical Tester
- Fluke 1AC-II Volt Alert
- Fluke H5 holster



£ 142
 Save up to
20%*

T5-600/62MAX+/1AC Kit

- Fluke T5-600 Electrical Tester
- Fluke 62MAX+ IR Thermometer
- Fluke 1AC-II Volt Alert
- C115 soft meter case



£ 197
 Save up to
33%*

62MAX+/323/1AC Kit

- Fluke 62MAX+ IR Thermometer
- Fluke 323 Clamp Meter
- Fluke 1AC-II Volt Alert
- C115 Soft meter case



£ 200
 Save up to
25%*

414D/62MAX+ Kit

- Fluke 414D Laser Distance Meter
- Fluke 62MAX+ IR Thermometer



£ 150
 Save up to
20%*

* Saving based on the cost of purchasing the individual items separately at manufacturers recommended resale price.