

TECHNICAL DATA

Fluke v3000 FC Wireless AC Voltage Kit









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Key features

The Fluke FC Wireless v3000 Voltage Kit provides measurement of many common electrical parameters

The Fluke 3000 FC Series Wireless Multimeter with the Fluke Connect® app has all the essentials for convenient test and measurement troubleshooting:

- AC and DC voltage measurements to 1000 V
- AC and DC current with 0.01 mA resolution
- Continuity, resistance, diode test, capacitance and frequency measurements
- MIN/MAX recording
- CAT III 1000 V, Cat IV 600 V; IP54

With the Fluke v3000 FC Wireless AC Voltage Module you can:

- Measure up to 1000 V True-RMS AC
- Use as a standalone meter or as part of the system
- Use the logging function for recording and saving up to 65,000 readings

Product overview: Fluke v3000 FC Wireless AC Voltage Kit

The Fluke v3000 FC WirelessVoltage Kit is part of the Fluke Connect team of wireless test tools

Connect the v3000 FC Wireless AC Voltage Module to your test point, and view the results up to 20 meters away on the 3000 FC Wireless Digital Multimeter.

You'll save time, with less run-around collecting multiple measurements. Use multiple modules for measurements on three-phase systems, as a stand-alone measurement tool or combine with other Fluke Connect® modules as a system for multiple measurements.

From short distances, you can even view readings from modules through closed electrical panels. Plus no more writing down data as the FC Wireless Temperature Module captures up to 65,000 sets of time stamped min/max/avg readings, using the optional PC adapter. Fluke Connect wireless test tools also offer increased safety by letting you view readings in a separate location from the test point.

Now you can take readings on moving machinery, with only the measurement module in harm's way.

Specifications: Fluke v3000 FC Wireless AC Voltage Kit

Fluke 3000 FC Wireless Digital Multimeter

* For all specifications: accuracy is specified for one year after calibration, at operating temperatures of 18° C to 28° C, with relative humidity at 0% to 90%. Accuracy specifications take the form of $\pm([\% \text{ of Reading}] + [\text{Number of least significant digits}])$.

| Detailed Specifications | |
|-------------------------|--|
| AC Voltage | |
| | |



| Papao ¹ | Resolution | Accuracy ²³⁴ | Accuracy ^{2 3 4} |
|--------------------|------------|-------------------------|---------------------------|
| Range ¹ | Resolution | 45 Hz to 500 Hz | 500 Hz to 1 kHz |
| 600.0 mV | 0.1 mV | | |
| 6.000 V | 0.001 V | | 2.0% + 3 |
| 60.00 V | 0.01 V | 1.0% + 3 | |
| 600.0 V | 0.1 V | | |
| 1000 V | 1 V | | |

All AC voltage ranges are specified from 1% of range to 100% of range.
 Crest factor of II 3 at full scale up to 500 V, decreasing linearly to crest factor < 1.5 at 1000 V.
 For non-sinusoidial waveforms, add ±(2% of reading + 2% full scale) typical, for crest factor up to 3.

4. Do not exceed 107 V-Hz.

| DC Voltage, Continuity, Resistance, Dioc | de Test and Capacitance |
|--|-------------------------|
|--|-------------------------|

| Function | Range | Resolution | Accuracy |
|------------|----------------------|------------|---|
| mV | 600.0 mV | 0.1 mV | 0.09% + 2 |
| | 6.000 V | 0.001 V | |
| V | 60.00 V | 0.01 V | 0.09% + 2 |
| V | 600.0 V | 0.1 V | |
| | 1000 V | 1 V | 0.15% + 2 |
| Ω | 600 Ω | 1 Ω | Meter beeps at < 25 Ω , beeper detects opens or shorts of 250 μ s or longer. |
| | 600.0 Ω | 0.1 Ω | 0.5% + 2 |
| | 6.000 kΩ | 0.001 kΩ | |
| 0 | 60.00 kΩ | 0.01 kΩ | 0.5% + 1 |
| Ω | 60.00 kΩ | 0.1 kΩ | 0.5% + 1 |
| | 600.0 kΩ | 0.001 MΩ | |
| | 50.00 MΩ | 0.01 MΩ | 1.5% + 3 |
| Diode test | 2.000 V | 0.001 V | 1% + 2 |
| | 1000 nF | 1 nF | |
| | 10.00 μF | 0.01 μF | 1.2% + 2 |
| μF | 100.0 μF | 0.1 μF | |
| | 9999 μF ¹ | 1 μF | 10% typical |

1. In the 9999 μ F range for measurements to 1000 μ F, the measurement accuracy is 1.2% + 2.

AC and DC Current

| Function | Range ¹ | Resolution | Accuracy |
|------------------|-----------------------|------------|----------|
| mA AC | 60.00 mA | 0.01 mA | 1.5% + 3 |
| (45 Hz to 1 kHz) | 400.0 mA ³ | 0.1 mA | 1.5% + 5 |



| mA DC ² | 60.00 mA | 0.01 mA | 0 604 + 2 | |
|--------------------|-----------------------|---------|-----------|--|
| MA DC | 400.0 mA ³ | 0.1 mA | 0.5% + 3 | |

1. All AC current ranges are specified from 5% of range to 100% of range.

Input burden voltage (typical): 400 mA input 2 mV/mA.
 400.0 mA accuracy specified up to 600 mA overload.

Frequency

| Range | Resolution | Accuracy ¹ | |
|--|------------|-----------------------|--|
| 99.99 Hz | 0.01 Hz | | |
| 999.9 Hz | 0.1 Hz | 0.1% + 1 | |
| 9.999 kHz | 0.001 kHz | 0.1% + 1 | |
| 99.99 kHz | 0.01 kHz | | |
| 1. Frequency is specified up to 99.99 kHz in volts and up to 10 kHz in amps. | | | |

Input Characteristics

| Function | Overload protection | Input impedance (nominal) | Common mode (1 kΩ unbalanc | | Normal mode rejection |
|---------------------------|-----------------------------------|---------------------------------|--------------------------------|----------------|------------------------------|
| × | 1100 Vrms | > 10 MΩ < 100 pF | > 120 dB at DC, 5 | 50 Hz or 60 Hz | > 60 dB at 50 Hz or 60 Hz |
| × | 1100 Vrms | > 10 MΩ < 100 pF | > 60 dB, DC to 60 |) Hz | |
| × | 1100 Vrms | > 10 MΩ < 100 pF | > 120 dB at DC, 50 Hz or 60 Hz | | > 60 dB at 50 Hz or 60 Hz |
| | | Full scale voltage | | Typical short | |
| Open circuit test voltage | | | Το 6 ΜΩ | 50 ΜΩ | circuit current |
| × | 1100 Vrms | < 2.7 VDC | < 0.7 VDC | < 0.9 VDC | < 350 mA |
| × | 1100 Vrms | < 2.7 VDC | 2.000 VDC < 1.1 mA | | < 1.1 mA |
| mA Function | | | | | |
| Overload Protection | Fused, 44/100 A, 1000 V FAST Fuse | | | | |

Overload 600 mA overload for 2 minutes maximum, 10 minutes rest minimum MIN/MAX Recording Accuracy

| DC functions | The specified accuracy of the measurement function ± 12 counts for changes > 350 mS in duration. |
|---|--|
| AC functions | The specified accuracy of the measurement function ± 40 counts for changes > 900 mS in duration. |
| General Specifications | |
| Maximum voltage between any terminal and earth ground | 1000 VDC or AC rms |
| Ω fuse protection from A inputs | 0.44 A (44/100 A, 440 mA), 1000 V FAST Fuse, Fluke specified part only |



| | Update rate | 4/sec | | |
|---|---|--|--|--|
| Display (LCD) | Volts, amps, ohms | 6000 counts | | |
| | Frequency | 10,000 counts | | |
| | Capacitance | 1,000 counts | | |
| Baery type | Three AA Alkaline baeries, NEDA 1 | 5A IEC LR6 | | |
| Baery life | 250 hours minimum | | | |
| RF communications | 2.4 GHZ ISM Band | | | |
| | Open air, unobstructed | Up to 20 m | | |
| RF communication range | Obstructed, sheetrock wall | Up to 6.5 m | | |
| | Obstructed, concrete wall, or steel electrical enclosure | Up to 3.5 m | | |
| Temperature | Operating | -10°C to 50°C | | |
| Temperature | Storage | -40°C to 60°C | | |
| Temperature coefficient | 0.1 x (specified accuracy) / °C (< 18 | 8°C or > 28°C) | | |
| Relative humidity | 0% to 90% (0°C to 35°C) 0% to 75% (35°C to 40°C) 0% to 45% (40°C to 50°C) | | | |
| Altitude | Operating | 2,000 m | | |
| Annuale | Storage | 12,000 m | | |
| Electromagnetic compatibility EMI, RFI, EMC, RF | ETSI EN 300 328 V1.7.1:2006, ETSI V1.8.1:2008, FCC Part 15 Subpart (| EN 61326-1:2006, EN 61326-2-2:2006 ETSI EN 300 328 V1.7.1:2006, ETSI EN 300 489 V1.8.1:2008, FCC Part 15 Subpart C Sections 15.207, 15.209, 15.249 FCCID : FCC: T68-FDMMBLE IC: 6627A-FDMMBLE | | |
| | ANSI/ISA 61010-1 / (82.02.01) | 3rd edition | | |
| | CAN/CSA-C22.2 No 61010-1-12 | 3rd edition | | |
| Safety compliance | UL 61010-1 | 3rd edition | | |
| | IEC/EN 61010-1 | 2010 | | |
| Certifications | CSA, FCC, CE | CSA, FCC, CE | | |
| Ingress Protection (IP) rating | IP54 | | | |
| Pollution degree | 2 | | | |
| Size (H x W x L) | 4.75 x 9.3 x 20.7 cm (1.87 x 3.68 x | 8.14 in) | | |
| Weight | 340 g (12 oz) | | | |
| Warranty | Three years | | | |
| Not compatible with Fluke (| CNX test tools | | | |

Fluke v3000 FC Wireless AC Voltage Module

Accuracy is specified as ±([% of reading] + [number of least significant digits]). All ranges are autoranging. Accuracy is specified from 5% to 100% of the range obtained by autoranging, from 18°C to 28°C.



| Specifications | | | |
|---------------------------------|--|----------|--|
| Range ¹ / Resolution | 6.000 V / 0.001 V 60.00 V / 0.01 V 600.0 V / 0.1 V 1000 V / 1 V | | |
| Accuracy ^{2 3 4} | 45 Hz to 500 Hz | 1.0% + 3 | |
| | 500 Hz to 1 kHz | 2.0% + 3 | |

- 1. All AC voltage ranges are specified from 1% of range to 100% of range.2. Crest factor of \Box 3 at full scale up to 500 V, decreasing linearly to crest factor < 1.5 at 1000 V.</td>3. For non-sinusoidial waveforms, add ±(2% of reading + 2% full scale) typical, for crest factor up to 3.

4. Do not exceed 107 V-Hz.

| General Specifications | | |
|-----------------------------------|---|-------------|
| LCD w/ backlight | 3½ digits, 6000 counts, updates 4/sec | |
| Baery type | 2 AA, NEDA 15 A, IEC LR6 | |
| Baery life | 400 Hours | |
| Memory | Record up to 65000 readings | |
| RF communications | 2.4 GHZ ISM Band | |
| RF communication range | Open air, unobstructed | Up to 20 m |
| | Obstructed, sheetrock wall | Up to 6.5 m |
| | Obstructed, concrete wall or steel electrical enclosure | Up to 3.5 m |
| Operating temperature | -10°C to +50°C | |
| Storage temperature | -40°C to +60°C | |
| Temperature coefficient | 0.1 x (specified accuracy) / °C (< 18°C or > 28°C) | |
| Operating humidity | 90% at 35°C, 45% at 40°C, 45% at 50°C | |
| Altitude | Operating | 2,000 m |
| | Storage | 12,000 m |
| EMC | EN 61326-1:2006 | |
| Safety compliance | ANSI/ISA 61010-1 / (82.02.01) | 3rd edition |
| | CAN/CSA-C22.2 No 61010-1-12 | 3rd edition |
| | UL 61010-1 | 3rd edition |
| | IEC/EN 61010-1 | 2010 |
| Safety rating | CAT IV 600 V, CAT III 1000 V | |
| Certifications | CSA, CE, FCC: T68-FBLE IC: 6627A-FBLE | |
| Ingress Protection (IP) rating | IP42 | |
| Pollution Degree | 2 | |
| Size (H x W x D) | 16.5 x 6.35 x 1.4 cm (6.5 x 2.5 x 1.4 in) | |
| Weight | .22 kg (8 oz) | |

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| Warranty | Three years | |
|--|-------------|--|
| Not compatible with Fluke CNX test tools | | |



Ordering information



FLK-v3000 FC Kit

Fluke v3000 FC Wireless AC Voltage Kit

Includes:

- Fluke 3000 FC Series Wireless Multimeter
- Fluke v3000 AC Voltage Module
- TL175 Test Leads
- TL224 Test Leads
- AC175 Alligator Clips
- AC285 Alligator Clips
- Magnetic hanging strap





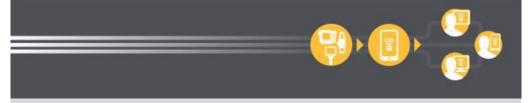
Preventive maintenance simplified. Rework eliminated.

Save time and improve the reliability of your maintenance data by wirelessly syncing measurements using the Fluke Connect™ system.

- Eliminate data-entry errors by saving measurements directly from the tool and associating them with the work order, report or asset record.
- Maximize uptime and make confident maintenance decisions with data you can trust and trace.
- Access baseline, historical and current measurements by asset.
- Move away from clipboards, notebooks and multiple spreadsheets with a wireless one-step measurement transfer.
- Share your measurement data using ShareLive[™] video calls and emails.

Find out more at **flukeconnect.com**





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Smart phone wireless service and data plan not included with purchase. Fluke Connect is not available in all countries.