

5XP-A, 15XP-B, 35XP-A Compact Digital Multimeter Series

Superior features and accuracy in a compact size



5XP-A
Digital Multimeter
with non-contact voltage
detection

15XP-B
Digital Multimeter
with non-contact voltage
detection

35XP-A
Digital Multimeter
with temperature

Residential, commercial multimeter

The right choice for residential, commercial and general troubleshooting applications. The 5XP-A has unique features such as VolTect™ non-contact voltage (NVC) detection and our exclusive Magne-Grip™ holster that frees both hands for work.

- **27 ranges/10 functions**
- **Battery load test** with 1.5 V and 9 V capabilities
- **MinMax** record minimum and maximum values
- **Magne-Grip™ holster holder** with magnetic hanging strap frees both hands for work
- **VolTect™** non-contact voltage detection

Commercial, industrial multimeter

Designed for electronics engineers and field service technicians, the 15XP-B features TTL logic test for digital circuits, diode test for component level troubleshooting, a special 2000 MΩ measurement range, and an integrated tilt stand for convenience on the bench.

- **Autoranging display** for faster measurements
- **TTL logic test** for digital circuits
- **Integrated tilt stand** for hands free use
- **Diode test** for component level troubleshooting
- **Data Hold** freezes display to “hold” measurement reading
- **600V AC / 600V DC**—highest voltage rating in this size of meter
- **Special 2000 MΩ** measurement range
- **VolTect™** non-contact voltage detection

HVAC, electrical industrial multimeter

The compact, full-featured 35XP-A offers all the right features for HVAC, electrical and plant maintenance. It measures temperature, plus capacitance for motor run/ start test, and offers 0.1 μA resolution for flame sensor testing.

- **Temperature measurement capability** to 1000 °C/1832 °F (Type K thermocouple included)
- **600 V AC/600 V DC** - highest voltage rating in this class of meter
- **Capacitance** for motor run/start test
- **0.1 μA resolution** for flame sensor testing
- **Frequency to 1 MHz**
- **Resistance to 40 MΩ**
- **Data Hold** freezes display to “hold” measurement reading
- **Auto power-off**
- **Low battery Indicator**
- **Magne-Grip™ holster holder** with magnetic hanging strap frees both hands for work
- **VolTect™** non-contact voltage detection

All Amprobe tools, including the Amprobe XP series, are rigorously tested for safety, accuracy, reliability, and ruggedness in our state-of-the-art test lab. In addition, Amprobe products that measure electricity are listed by a 3rd party safety lab, either UL or CSA. This system assures that Amprobe products meet or exceed safety regulations and will perform in a tough, professional environment for many years to come.



Detailed Specifications

| Features | 5XP-A | 15XP-B | 35XP-A |
|---|---|--|---|
| Safety Rating | CAT II 600 V, CAT III 300 V | CAT III 600 V | CAT II 600 V, CAT III 300 V |
| AC Voltage | Range: 200.0 mV, 2.000 V, 20.00 V, 200.0 V, 600 V Accuracy: ± (1.5 % rdg + 5 dgts) | Range: 200.0 mV, 2.000 V, 20.00 V, 200.0 V, 600 V Accuracy: ± (1.5 % rdg + 5 dgts) | Range: 400.0 mV, 4.000 V, 40.00 V, 400.0 V, 600 V (45 Hz to 500 Hz) Accuracy: ± (1.5 % rdg + 5 dgts) |
| DC Voltage | Range: 200.0 mV, 2.000 V, 20.00 V, 200.0 V, 600 V Accuracy: ± (1.0 % rdg + 1 dgt) | Range: 200.0 mV, 2.000 V, 20.00 V, 200.0 V, 600 V Accuracy: ± (1.0 % rdg + 1 dgt) | Range: 400.0 mV, 4.000 V, 40.00 V, 400.0 V, 600 V Accuracy: ± (0.5 % rdg + 1 dgt) |
| AC Current | Range: 200.0 µA, 2.000 mA, 20.00 mA, 200.0 mA Accuracy: ± (2.0 % rdg + 5 dgts) | Range: 200.0 µA, 2.000 mA, 20.00 mA, 200.0 mA Accuracy: (1.5 % rdg + 5 dgt) 2A, ± (2.5 % rdg + 5 dgt) | Range: 400.0 µA, 4.000 µA, 40.00 mA, 400.0 mA, 2 A (45 Hz to 500 Hz) Accuracy: ± (1.5 % rdg + 5 dgts), ± (2.5 % rdg + 5 dgts) |
| DC Current | Range: 200.0 µA, 2.000 mA, 20.00 mA, 200.0 mA Accuracy: ± (1.5 % rdg + 1 dgt) | Range: 200.0 µA, 2.000 mA, 20.00 mA, 200.0 mA Accuracy: ± (1.0 % rdg + 1 dgt) 2A, ± (2.0 % rdg + 3 dgt) | Range: 400.0 µA, 4.000 µA, 40.00 mA, 400.0 mA, 2 A Accuracy: ± (1.0 % rdg + 2 dgt), ± (2.0 % rdg + 3 dgts) |
| Voltage resolution | 100 µV | | |
| Input impedance | 10 MΩ | 400 mV: >100 MΩ; 4 V: 10 MΩ; 40 V to 1000 V: 9.1 MΩ | 400 mV: >100 MΩ; 4 V: 10 MΩ; 40 V to 600 V: 9.1 MΩ |
| Overload protection | 200 mV: 600 V dc or 600 V ac rms (3 minutes) All other ranges: 600 V dc or 600 V ac rms | 600 V dc or 600 V ac rms | |
| Current resolution | 0.1 µA | | |
| Input protection | 2 A/1000 V fast blow ceramic fuse, 6.3 mm x 32 mm on A input | | |
| Burden voltage | 300 mV max. (1 V max. on 200 mA range) | 500 mV max. (2 V max. on 2 mA, 200 mA ranges) | 500 mV max. (2 V max. on 4 mA, 400 mA ranges) |
| Resistance | Range: 200.0 Ω, 2.000 kΩ, 20.00 kΩ, 200.0 kΩ, 2.000 MΩ, 20.00 MΩ, 2 MΩ, 20 MΩ Accuracy: ± (1.0 % rdg + 4 dgts), ± (1.5 % rdg + 4 dgts), ± (2.0 % rdg + 5 dgts) | Range: 200.0 Ω, 2.000 kΩ, 20.00 kΩ, 200.0 kΩ, 2.000 MΩ, 20.00 MΩ, 2000 MΩ Accuracy: ± (1.0 % rdg + 4 dgts) 2000 MΩ, ± (5.0 % (rdg -10 dgt) +20 dgt) | Range: 40.00 kΩ, 400.0 kΩ, 4.000 MΩ, 40.00 MΩ Accuracy: ± (1.0 % rdg + 4 dgts), ± (3.0 % rdg + 5 dgts) |
| Capacitance | - | - | Range: 4.000 nF, 40.00 nF, 4.000 µF, 40.00 µF, 400.0 µF, 4.000 mF Accuracy: ± (5.0 % rdg + 30 dgts) ± (5.0 % rdg + 5 dgts) ± (5.0 % rdg + 15 dgts) |
| Continuity Beeper | Audible Indication: Less than 25 Ω Response Time: 100 ms Overload Protection: 600 V DC or 600 V AC rms | | |
| Temperature* (Type K thermocouple) *K-type thermocouple accuracy tolerances not included | - | - | Range: -4°F to 1832°F, (-20°C to 1000°C), -4 °F to 50 °F (-20 °C to 10 °C), 50 °F to 400 °F (10 °C to 200 °C), 400 °F to 1832 °F (200 °C to 1000 °C) Accuracy: ± 2.0 % rdg + 8 °F, ± (2.0 % rdg + 4 °C), ± 1.0 % rdg + 6 °F, ± (1.0 % rdg + 3 °C) ± 3.0 % rdg + 4 °F, ± (3.0 % rdg + 2 °C) |
| Frequency | - | - | Range: 4.000 kHz, 40.00 kHz, 400.0 kHz, 1 MHz Accuracy: ± (0.1 % rdg + 3 dgts) |
| Diode Test | Range: 1.0 mA (approximate) Accuracy: ±(1.5 % rdg + 3 dgts) | Range: 1.2 mA (approximate) Accuracy: ± (1.5 % rdg + 3 dgts) | Range: 1.2 mA (approximate) Accuracy: ± (1.5 % rdg + 3 dgts) |
| Logic Test | - | TTL, 20 MHz | - |
| VolTect™ Non-Contact Voltage Detection | Sense voltage 70 V AC to 600 V AC (50 Hz to 60 Hz) beeper chirps and big bright red LED comes on, works on all ranges | | |
| Auto Power Off | • | • | • |
| Low Battery Indicator | • | • | • |
| General Specifications | | | |
| Display | 3-1/2 digit LCD max reading 1999 | | 3-3/4 digit LCD max reading 3999 |
| Polarity | Automatic, positive implied, negative polarity indication | | |
| Overrange | (OL) or (-OL) is displayed | | |
| Zero | - | Automatic | Automatic |
| Measurement Rate | 2.5 times per second, nominal | 2 times per second, nominal | 2 times per second, nominal |
| Operating Environment | 0 °C to 50 °C at <70 % R.H. | | |
| Storage Temperature | -20 °C to 60 °C, 0 to 80 % R.H. without battery | | |
| Accuracy | 23 °C ± 5 °C, <75 % relative humidity | | |
| Temperature Coefficient | 0.1 x (specified accuracy) per °C (0 °C to 18 °C, 28 °C to 50 °C) | | |
| Altitude | 2000 m (6561.7 ft) | | |
| Power | Single standard 9 volt battery, NEDA 1604, JIS 006P, IEC 6F22 | | |
| Battery Life | 200 hours typical with carbon-zinc, 400 hours typical with alkaline | | |
| Dimensions (H x W x D) | 155 mm x 72 mm x 32 mm (6.1 in x 2.8 in x 1.3 in) | 155 mm x 72 mm x 32 mm (6.1 x 2.83 x 1.26 in) | 155 mm x 72 mm x 32 mm (6.1 in x 2.8 in x 1.3 in) |
| Weight | Approx. 210 g (7.4 oz) including battery | | |

Included Accessories: Carrying case, Magne-Grip™ holder with hanging strap, user manual, test leads