

## Data Sheet

# 35XP Digital Multimeter

Part No. 01DM35XP



A compact, full-featured digital multimeter for plant maintenance, HVAC, electrical and electronic applications.

- Temperature measurement capability to 1000 °C/1832 °F (Type K thermocouple included)
- 750 V ac/1000 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
- Magne-Grip™ holster
- VolTect™ non-contact voltage detector
- Triple safety ratings

### Specifications

Function	Range	Accuracy
<b>Voltage</b>		
<b>DC Volts</b>		
Ranges	400 mV, 4 V, 40 V, 400 V, 1000 V	± (0.5 % rdg + 1 dgt)
<b>AC Volts (45 Hz to 500 Hz)</b>		
Ranges	400 mV (45 Hz to 100 Hz) 4 V, 40 V, 400 V, 750 V	± (1.5 % rdg + 5 dgts) ± (1.5 % rdg + 5 dgts)
<b>Resolution</b>	100 µV	
<b>Input Impedance</b>	400 mV: > 100 MΩ; 4 V: 10 MΩ; 40 V to 1000 V: 9.1 MΩ	
<b>Overload Protection</b>	1000 V dc or 750 V ac rms	
<b>Current</b>		
<b>DC Current</b>		
Ranges	400 µA, 4000 µA, 40 mA, 400 mA 2 A	± (1.0 % rdg + 2 dgt) ± (2.0 % rdg + 3 dgts)
<b>AC Current (45 Hz to 500 Hz)</b>		
Ranges	400 µA, 4000 µA, 40 mA, 400 mA 2 A	± (1.5 % rdg + 5 dgts) ± (2.5 % rdg + 5 dgts)
<b>Resolution</b>	0.1 µA	
<b>Input Protection</b>	2 A/1000 V fast blow ceramic fuse 6.3 mm x 32 mm on A input	
<b>Burden Voltage</b>	500 mV max. (2 V max. on 4 mA, 400 mA ranges)	
<b>Resistance</b>		
Ranges	400 Ω, 4 kΩ, 40 kΩ, 400 kΩ, 4 MΩ 40 MΩ	± (1.0 % rdg + 4 dgts) ± (2.0 % rdg + 5 dgts)
<b>Resolution</b>	100 mΩ	
<b>Open Circuit Voltage</b>	-0.45 V dc typical, (-1.2 V dc on 400 Ω range)	
<b>Overload Protection</b>	1000 V dc or 750 V ac rms	
<b>Capacitance</b>		
Ranges	4 nF, 40 nF, 400 nF, 4 µF 40 µF, 400 µF 4 mF	± (5.0 % rdg + 30 dgts) ± (5.0 % rdg + 5 dgts) ± (5.0 % rdg + 15 dgts)
<b>Resolution</b>	1 pF	
<b>Test Voltage</b>	< 1 V	
<b>Test Frequency</b>	1.3 Hz on 4 nF to 40 µF ranges, 0.7 Hz on 400 µF, 4 mF ranges	
<b>Input Protection</b>	2 A/1000 V fast blow ceramic fuse 6.3 mm x 32 mm on A input	
<b>Temperature</b>		
Ranges	400 °C, 1000 °C, 400 °F, 1832 °F -20 °C to 10 °C 10 °C to 200 °C 200 °C to 1000 °C -4 °F to 50 °F 50 °F to 400 °F 400 °F to 1832 °F	± (2.0 % rdg + 4 °C) ± (1.0 % rdg + 3 °C) ± (3.0 % rdg + 2 °C) ± (2.0 % rdg + 8 °F) ± (1.0 % rdg + 6 °F) ± (3.0 % rdg + 4 °F)
<b>Resolution</b>	0.1 °C, 0.1 °F	
<b>Overload Protection</b>	1000 V dc or 750 V ac rms	



## Specifications *cont.*

Function	Range	Accuracy
<b>Frequency</b>	4 k, 40 k, 400 k, 1 M	± (0.1 % rdg + 3 dgts)
<b>Resolution</b>	1 Hz	
<b>Sensitivity</b>	10 Hz to 1 MHz: >2.5 V rms	
<b>Minimum Pulse Width</b>	> 25 ns	
<b>Duty Cycle Limits</b>	> 30 % and < 70 %	
<b>Overload Protection</b>	1000 V dc or 750 V ac rms	
<b>Continuity</b>		
<b>Audible Indication</b>	Less than 25 Ω	
<b>Response Time</b>	100 ms	
<b>Overload Protection</b>	1000 VDC or 750 VAC rms	
<b>Diode Test</b>		
<b>Test Current</b>	1.2 mA (approximate)	± (1.5 % rdg + 3 dgts)
<b>Resolution</b>	1 mV	
<b>Open Circuit Voltage</b>	3.0 dc typical	
<b>Overload Protection</b>	1000 V dc or 750 V ac rms	
<b>Non-Contact Voltage Indicator</b>		
Sense voltage 70 V to 600 V ac beeper chirps and big bright red LED comes on, works on all ranges		

## General Specifications

<b>Display</b>	3-3/4 digit liquid crystal display (LCD) with a maximum reading of 3999
<b>Polarity</b>	Automatic, positive implied, negative polarity indication
<b>Overrange</b>	(OL) or (-OL) is displayed
<b>Zero</b>	Automatic
<b>Low Battery Indication</b>	The "⚡" is displayed when the battery voltage drops below the operating level
<b>Auto Power Off</b>	Approx. 10 minutes
<b>Measurement Rate</b>	2 times per second, nominal
<b>Operating Environment</b>	0 °C to 50 °C at <70 % R.H.
<b>Storage Temperature</b>	-20 °C to 60 °C, 0 to 80 % R.H. with battery removed from meter
<b>Accuracy</b>	Stated accuracy at 23 °C ± 5 °C, <75 % relative humidity
<b>Temperature Coefficient</b>	0.1 x (specified accuracy) per °C (0 °C to 18 °C, 28 °C to 50 °C)
<b>Altitude</b>	2000 m
<b>Power</b>	Single standard 9 volt battery, NEDA 1604, JIS 006P, IEC 6F22
<b>Battery Life</b>	150 hours typical with carbon-zinc, 300 hours typical with alkaline
<b>Dimensions (H x W x D)</b>	155 mm x 72 mm x 32 mm
<b>Weight</b>	Approx. 400 g including battery
<b>Warranty</b>	One-year

## Included Accessories

Pair of test leads (TL245), K-type thermocouple (TP255), temperature adapter (XR-TA), fuse 2 A/ 1000 V (P/N FP200), 9 V battery (installed), Magne-Grip™ Holster with magnetic hanging strap (H2-XR) and users manual.

## Optional Accessories

**VC30** Carrying Case

**DL243C** Test Lead Kit

