



## 35XP-A Digital Multimeter

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  $\mu$ A resolution for flame  
sensor testing
- Frequency to 1 MHz
- Resistance to 40 M $\Omega$
- Data Hold freezes display
- Magne-Grip™ holster
- VolTect™ non-contact voltage  
detector
- Triple safety ratings



35XP-A

### No hassle warranty

*No waiting.*

*No shipping  
charges.*



Our commitment to high-quality products and customer service is demonstrated by our industry exclusive "No Hassle" warranty. In the unlikely event that an Amprobe Test Tool requires warranty service, any of our local dealers are authorized to replace it, on the spot.

(note: \$500 MSLP limit)



## 35XP-A Digital Multimeter

## Data Sheet

### General Specifications

Display	3-3/4 digit liquid crystal display (LCD) with a maximum reading of 3999
Polarity	Automatic, positive implied, negative polarity indication
Overrange	(OL) or (-OL) is displayed
Zero	Automatic
Low Battery Indication	The "⚡" is displayed when the battery voltage drops below the operating level
Auto Power Off	Approx. 10 minutes
Measurement Rate	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. with battery removed from meter
Accuracy	Stated accuracy at 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
Power	Single standard 9 volt battery, NEDA 1604, JIS 006P, IEC 6F22
Battery Life	150 hours typical with carbon-zinc, 300 hours typical with alkaline
Dimensions (H x W x D)	155 mm x 72 mm x 32 mm
Weight	Approx. 400 g including battery
Warranty	One-year

### Specifications

Function	Range	Accuracy
<b>Voltage</b>		
DC Volts		
Ranges	400 mV, 4 V, 40 V, 400 V, 1000 V	± (0.5 % rdg + 1 dgt)
AC Volts (45 Hz to 500 Hz)		
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)
Resolution	100 µV	
Input Impedance	400 mV: >100 MΩ; 4 V: 10 MΩ; 40 V to 1000 V: 9.1 MΩ	
Overload Protection	1000 V DC or 750 V AC RMS	
<b>Current</b>		
DC Current		
Ranges	400 µA, 4000 µA, 40 mA, 400 mA 2 A	± (1.0 % rdg + 2 dgt) ± (2.0 % rdg + 3 dgts)
AC Current (45 Hz to 500 Hz)		
Ranges	400 µA, 4000 µA, 40 mA, 400 mA 2 A	± (1.5 % rdg + 5 dgts) ± (2.5 % rdg + 5 dgts)
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	500 mV max. (2 V max. on 4 mA, 400 mA ranges)	
Resistance		
	400 Ω, 4 kΩ, 40 kΩ, 400 kΩ, 4 MΩ 40 MΩ	± (1.0 % rdg + 4 dgts) ± (2.0 % rdg + 5 dgts)
Resolution	100 mΩ	
Open Circuit Voltage	-0.45 V DC typical, (-1.2 V DC on 400 Ω range)	
Overload Protection	1000 V DC or 750 V AC RMS	

**Specifications, cont.**

Function	Range	Accuracy
<b>Capacitance</b>	4 nF, 40 nF, 400 nF, 4 $\mu$ F	$\pm$ (5.0 % rdg + 30 dgts)
	40 $\mu$ F, 400 $\mu$ F	$\pm$ (5.0 % rdg + 5 dgts)
	4 mF	$\pm$ (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 $\mu$ F ranges, 0.7 Hz on 400 $\mu$ F, 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>	400 °C, 1000 °C, 400 °F, 1832 °F	
	-20 °C to 10 °C	$\pm$ (2.0 % rdg + 4 °C)
	10 °C to 200 °C	$\pm$ (1.0 % rdg + 3 °C)
	200 °C to 1000 °C	$\pm$ (3.0 % rdg + 2 °C)
	-4 °F to 50 °F	$\pm$ (2.0 % rdg + 8 °F)
	50 °F to 400 °F	$\pm$ (1.0 % rdg + 6 °F)
	400 °F to 1832 °F	$\pm$ (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	
	1000 V 600 V 300 V	
<b>Frequency</b>	4 k, 40 k, 400 k, 1 M	$\pm$ (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 $\Omega$
	<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) $\pm$ (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		



### Included Accessories

Pair of test leads (TL245A), K-type thermocouple (TP255A), 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

VC30A Carrying Case  
DL243D Test Lead Kit