



## **Hoyt Portable Meters**

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## ST-2000 A Portable AC/DC Ammeter



### Specifications

Principle:	Moving coil type
Accuracy:	Class 0.5
Scale Length	Approx. 135mm (5-3/8")
Weight	Approx. 1.7kg
Dimension	196(L) x 170(W) x 87(D) mm
Case Material	Bakelite with glass window

Special specification: Please contact with us.

AC/DC Ammeter is moving coil or rectifier instrument.

### AC Ammeter

	Ranges	No.
2 Ranges	20/100mA	1301
	50/100mA	1302
	100/500mA	1303
	0.2/1A	1304
	0.5/1A	1305
	1/5A	1306
	2/10A	1307
	5/25A	1308
	10/30A	1309
	5/30A	1322
3 Ranges	20/100/500mA	1310
	100/500/1000mA	1311
	0.2/0.5/1A	1312
	0.5/1/2A	1313
	2/5/10A	1314
4 Ranges	5/10/20A	1315
	20/50/100/200mA	1316
	0.1/0.2/0.5/1A	1317
	0.5/1/2.5/5A	1318
	2/5/10/20A	1319
10/30/100/300mA	1321	

### DC Ammeter

	Ranges	No.
2 Ranges	100/500μA	1404
	500/1000μA	1405
	10/50mA	1406
	50/100mA	1407
	50/500mA	1408
3 Ranges	10/30/100mA	1409
	0.1/0.3/1A	1410
	1/3/10A	1411
4 Ranges	3/10/30A	1412
	0.1/0.3/1/3mA	1414
	1/3/10/30mA	1415
	10/30/100/300mA	1416
	0.1/0.3/1/3A	1417
	1/3/10/30A	1418
30/100/300/1000mA	1419	

## ST-2000 V Portable AC/DC Voltmeter



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### Specifications

Principle:	Moving coil type
Accuracy:	Class 0.5
Scale Length	Approx. 135mm (5-3/8")
Weight	Approx. 1.7kg
Dimension	196(L) x 170(W) x 87(D) mm
Case Material	Bakelite with glass window

Special specification: Please contact with us.

AC/DC Voltmeter is moving coil or rectifier instrument.

### AC Voltmeter

	Ranges	No.
2 Ranges	15/30V	1501
	30/75V	1502
	75/150V	1503
	150/300V	1504
	300/750V	1505
3 Ranges	75/150/300V	1506
	150/300/600V	1507
	150/300/750V	1508

### DC Voltmeter

	Ranges	No.
1 Range	50mV	1601
2 Ranges	5/10V	1602
	1/3V	1603
	10/30V	1604
	30/100V	1605
	30/150V	1606
	100/300V	1607
3 Ranges	300/1000V	1608
	1/3/10V	1610
	3/10/30V	1611
4 Ranges	30/100/300V	1612
	3/10/30/100V	1614
	1/3/10/30V	1615
	10/30/100/300V	1616
	30/100/300/1000V	1617

## ST-2000 Hz Portable Frequency Meter



The Hz meters use a frequency-to-DC current transducer which drives a high sensitivity moving coil type indicator. It features accurate frequency measurements without noticeable influence of line voltage fluctuation (50 to 300V) or waveform distortion.

### Specifications

Principle:	Frequency sensing transducer
Accuracy:	Class 0.5 value on 45 to 65 Hz range Class 0.5 value on 0 to 100Hz range Class 0.5 value on 0 to 500Hz range
Scale Length	Approx. 135mm (5-3/8")
Case Material	Bakelite with glass window

### Hz Meter

Frequency	Voltage	No.
45-65Hz	120/240V	1701
0-100Hz	120/240V	1702
0-500Hz	120/240V	1703

## ST-2000 Cos Portable Power Factor Meter



The PF meter is used for measurement in single-phase and balanced three-phase circuits. From a phase discriminating circuits, the output of the builtin transducer produces a DC proportional to the phase between voltage and current to operate the DC indicator.

### Specifications

Principle	Phase angle sensing transducer
Rated Accuracy	±3% phase angle
Scale	
Power Factor	Lead 0 – 0.3 – 1.0 – 0.3 – 0 Lag
Power Angle	Lead 90° – 0° – 90° Lag
Effective Power Factor Measuring Range	Lead 0.5 – 1.0 – 0.5 Lag
Scale Length	Approx. 135mm (5-3/8")
Frequency Influence	Within ±1.5° phase angle at 45 to 65Hz

### PF (1Ø, 3Ø) Meter

Current	Voltage	No.
0.2/1A	120V	3801
1/5A	(Usable in the range of	3802
5/25A	60-300V)	3803

## ST-2000 W Portable Wattmeter



The wattmeter is electrodynamicometer type, this instrument is highly reliable, and designed for use in laboratories or factories for precision measurement of power at AC and commercial frequencies 45-65Hz.

### Specifications

Principle:	Electrodynamometer type
Accuracy:	Class 0.5
Scale Length	Approx. 135mm (5-3/8")
Scale Divisions	120
Frequency Ranges	AC 25 to 1000Hz (COSØ=1.0) (suitable for DC) AC 25 to 500Hz (COSØ=0.2)

### Single-Phase Wattmeter

Range			
Current	Voltage	Power factor	No.
0.2/1A	120/240V	1.0	2101
1/5A	120/240V	1.0	2102
2/10A	120/240V	1.0	2103
5/25A	120/240V	1.0	2104
1/5A	240/480V	1.0	2119

Special specification: Please contact with us.

## Test Leads for St-2000 Series



(TEL-2000 30A)



(TEL-2000 30A B)



(AL-25C)



(AL-26C)



(AL11-C6)



(AL-42)

## ST-2001 DCV Digital Portable Voltmeter

### Features

- Big-size LCD (112 x 59mm)
- Backlight function.
- Analog scale with Bar-graph for viewing. (100 bars)
- 10000 counts (high resolution).
- DCV Ranges: 99.99mV~999.9V.
- 5 manual ranges controlled by rotary switch.
- Data Hold function
- Low battery indication
- 9V power supply
- Best resolution of 0.01mV (10uV)
- Precision meter for factory maintenance, field servicing and educational purposes.
- With an optical USB to RS-232 data transmission cable (DCV-R).
- 2 optical LEDs are built-in for data transfer (DCV-R).
- Well isolated to contact (DCV-R).
- The software is included (Compact disc). (DCV-R).

### Specifications

#### DC Voltmeter

Ranges	Resolution	Accuracy
100.00mV	10uV	
1000.0mV	100uV	
10.000V	1mV	±(0.1%rdg+4dgt)
100.00V	10mV	
1000.0V	100mV	

#### General

Operating Temperature & Humidity: 0°C ~ 40°C, 80% Max. R. H.  
 Storage Temperature & Humidity: -10°C ~ 50°C, 80% Max. R. H.  
 Dimensions (with holster): 177 (L) x 200 (W) x 105 (D) mm  
 Weight (battery included): Approx. 1190g  
 Power source 1.5V (AA) × 6  
 Safety standard EN 61010-1,  
 EN 61326-1

### Accessories

Instruction manual.  
 Batteries.  
 Data transmission cable CA-232 (DCV-R).  
 Compact disc(CD) for PC interface (DCV-R).  
 Test leads (Optional).  
 Alligators (Optional).  
 Holster (Optional).



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ST-2001 DCV-R



Holster CCO-2001



## ST-2001 ACV Digital Portable Voltmeter

### Features

- Big-size LCD (112 x 59mm)
- Backlight function.
- Analog scale with Bar-graph for viewing. (100 bars)
- 10000 counts (high resolution).
- ACV Ranges: 99.99mV~800.0V.
- 5 manual ranges controlled by rotary switch.
- Data Hold function
- Low battery indication
- 9V power supply
- Best resolution of 0.01mV (10uV)
- Precision meter for factory maintenance, field servicing and educational purposes.
- With an optical USB to RS-232 data transmission cable (ACV-R).
- 2 optical LEDs are built-in for data transfer (ACV-R).
- Well isolated to contact (ACV-R).
- The software is included (Compact disc). (ACV-R).

### Specifications

#### AC Voltmeter

Ranges	Resolution	Accuracy
100.00mV	10uV	
1000.0mV	100uV	
10.000V	1mV	50/60Hz : $\pm(0.3\%rdg+5dgt)$
100.00V	10mV	40~400Hz : $\pm(0.5\%rdg+6dgt)$
800.0V	100mV	

#### General

Operating Temperature & Humidity: 0°C ~ 40°C, 80% Max. R. H.

Storage Temperature & Humidity: -10°C ~ 50°C, 80% Max. R. H.

Dimensions (with holster): 177 (L) x 200 (W) x 105 (D) mm

Weight (battery included): Approx. 1190g

Power source 1.5V (AA) x 6

Safety standard EN 61010-1,  
EN 61326-1

#### Accessories

Instruction manual.

Batteries.

Data transmission cable CA-232 (ACV-R).

Compact disc(CD) for PC interface (ACV-R).

Test leads (Optional).

Alligators (Optional).

Holster (Optional).



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ST-2001 ACV-R



Holster CCO-2001

## ST-2004 Digital Portable Multimeter

### Features

- Big-size liquid crystal display.
- 3 ¾ digital LCD with a maximum display of 3999.
- Bar-graph LCD.
- Back light function.
- Data hold function.
- Auto-ranging design.
- Range change function.
- Relative/Maximum/Minimum modes.
- Peak hold mode.
- VAHz mode measures frequency in voltage or current mode.
- 40M Hz frequency counter.
- Auto power off.
- Continuity check.
- Low battery indication.
- Over range indication.
- Fuse protection.
- Easy-to-carry handle that doubles as a convenient stand.
- Robust case.
- Holster is optional.



### Specifications

#### DC Voltage (Input impedance : 10MΩ)

Ranges	Resolution	Accuracy
400mV	0.1mV	
4V	1mV	
40V	10mV	±(0.5%rdg+3dgt)
400V	100mV	
500V	1V	

#### DC Current (Overload Protection 0.5A/250V fast blow fuse)

Ranges	Resolution	Accuracy
400μA	0.1μA	
4000μA	1μA	±(1.0%rdg+5dgt)
40mA	0.01mA	
400mA	0.1mA	

#### Resistance (Overload Protection 500V DC)

Ranges	Resolution	Accuracy
400Ω	0.1Ω	
4kΩ	1Ω	
40kΩ	10Ω	±(1.5%rdg+5dgt)
400kΩ	100Ω	
4MΩ	1kΩ	
40MΩ	10kΩ	±(2%rdg+4dgt)

#### Frequency (Overload Protection 500V RMS)

Ranges	Resolution	Accuracy
4kHz	1Hz	
40kHz	10Hz	
400kHz	100Hz	±(1.0%rdg+2dgt)
4MHz	1kHz	
40MHz	10kHz	

#### Continuity Test

Ranges	Audible threshold
400.0Ω	Less than < 35Ω

#### AC Voltage (Input impedance : 10MΩ)

Ranges	Resolution	Accuracy
400mV	0.1mV	
4V	1mV	
40V	10mV	±(1.0%rdg+5dgt)
400V	100mV	
500V	1V	

#### AC Current (Overload Protection 0.5A/250V fast blow fuse)

Ranges	Resolution	Accuracy
400μA	0.1μA	
4000μA	1μA	±(1.0%rdg+5dgt)
40mA	0.01mA	
400mA	0.1mA	

### General

Low battery indication " B " sign appears on the display when the battery voltage drops below accurate operating level.

Operating temp. & humidity: 0°C ~ 40°C, 80% Max. R. H.

Storage temp. & humidity: -10°C ~ 50°C, 80% Max. R. H..

Dimensions (with holster): 177 (L) x 200 (W) x 105 (D) mm

Weight (battery included): Approx. 870g

Power source: 1.5V (AA) × 2

Safety standard EN 61010-1 CAT III 600V  
EN 61326-1

### Accessories

Instruction manual

Test leads (AL-11-5)

Batteries

Alligators (AL-20C) (Optional)

Holster(CCO-2001) (Optional)



CCO-2001