

Drop shock proof meter



SP21

- Continuity check buzzer
- Drop shock proof taut-band meter
- ±DCV zero center meter
- Fuse and diode protection
- Battery check
- Tilt stand

Bandwidth : 40~100kHz (AC12V)

Safety : IEC61010-1 (EN61010-1) 2001-02 CAT 600V

Optional accessories

HV probe : HV-20

Carrying case : C-SPH or C-SP

Clip adapter : CL-11, TL-81C, CL-15

Test lead : TL-21M, TLF-120



SP20

DC high voltage & temperature measurable

- 20ch measurement ranges
- Capacitance measurement 500μF
- Tilt stand
- DC high voltage and temperature measurement (with optional accessories)

Bandwidth : 40~100kHz (AC10V)

Optional accessories

HV probe : HV-10

Temperature probe : T-THP

Carrying case : C-SPH or C-SP

Clip adapter : CL-11, TL-81C

Test lead : TLF-120



SP-18D

Protective body cover

- Low power ohm (3V) measurement upto 200MΩ
- Capacitance measurement 0.01μF~1000μF
- LED check by 3V terminal voltage at resistance range
- Battery check
- Protective body cover

Bandwidth : 30~80kHz (AC12V), 30~20kHz (AC30V)

Optional accessories

Clip adapter : CL-11, TL-81C



TA55

30A range for automotive

- High level panel visibility
- Continuity check buzzer
- Tilt-stand
- Measurable upto DC30A / DC300A with optional clamp probe

Bandwidth : 40~5kHz

Optional accessories

Clamp probe : CL33DC

Carrying case : C-SPH or C-SP

Clip adapter : CL-11, TL-81C

Test lead : TL-91M, TLF-120



Function	Measuring range	Accuracy
DCV (NULL)	0.3 (5kΩ)/3/12/30/120/600V (20kΩ/V)	±3% of full scale
	±6/30V (20kΩ/V)	±5% of full scale
ACV	12/30/120/300/600V	±3% of full scale
DCA	60μ/30m/0.3A	±3% of full scale
Resistance	2k/20k/2MΩ	±3% of arc
Capacitance	500μF	*1
Continuity	Buzzer sounds at less than approx. 10Ω. Open voltage: 3V	
Bandwidth	40~100kHz (AC12V)	
Battery	R6P×2	
Fuse	φ6.3×30mm (250V/0.5A)	
Size / Weight	H144×W99×D41mm/approx. 270g	
Standard accessories included	Test lead (TL-21), Instruction manual	

*1 The value in () at DCV and ACV is input resistance.
*1 Pointer indication of the maximum move by charged current in the capacitor.



Function	Measuring range	Accuracy
DCV	0.25/2.5/10/50/100V (20kΩ/V)/500V (9kΩ/V)	±3% of full scale
ACV	10/50/250/500V (9kΩ/V)	±3% of full scale
DCA	50μ/2.5m/25m/0.25A	±3% of full scale
Resistance	2k/20k/200k/2MΩ	±3% of arc
Capacitance	500μF	*1
DC high voltage	DC25kV (Optional probe "HV-10" is necessary)	—
Temperature	-20 ~ +200°C (Optional probe "T-THP" is necessary)	±3% (T-THP)
Bandwidth	40~100kHz (AC10V)	
Battery	R6P×2	
Fuse	φ6.3×30mm (250V/0.5A)	
Size / Weight	H144×W99×D41mm/approx. 270g	
Standard accessories included	Test lead (TL-61), Instruction manual	

*1 The value in () at DCV and ACV is input resistance.
*1 Pointer indication of the maximum move by charged current in the capacitor.



Function	Measuring range	Accuracy
DCV	0.3/3/12/30/120/600V (20kΩ/V)	±3% of full scale
ACV	12/30/120/300/600V (9kΩ/V)	±3% of full scale
DCA	60μ/30m/0.3A	±3% of full scale
Resistance	2k/20k/2M/200MΩ	±3% of arc
Battery check	1.5V/1.5V Coin battery	—
Capacitance	1000μF	*1
Bandwidth	30~80kHz (AC 12V) 30~20kHz (AC 30V)	
Battery	R6P×2	
Fuse	φ5.2×20mm (250V/0.5A)	
Size / Weight	H159.5×W129×D41.5mm / approx. 320g	
Standard accessories included	Instruction manual	

*1 The value in () at DCV and ACV is input resistance.
*1 Pointer indication of the maximum move by charged current in the capacitor.



Function	Measuring range	Accuracy
DCV	0.3/3/16/30/60V (20kΩ/V)	±3% of full scale
ACV	30/120/300V (9kΩ/V)	±4% of full scale
DCA	0.5/3/30A	±5% of full scale
Resistance	2k/20k/200k/2MΩ	±3% of arc
Continuity	Buzzer sounds at less than approx. 10Ω. Open voltage: 3V	
Bandwidth	40~5kHz	
Battery	R6P×2	
Fuse	φ6.3×30mm (250V/3A)	
Size / Weight	H142×W97×D38mm/approx. 300g	
Standard accessories included	Test lead (TL-91), Instruction manual	

*1 The value in () at DCV and ACV is input resistance.

Slim compact AMT



CP-7D

23mm thick small size

- Wide scale panel with mirror
- Affixed test leads providing better safety
- High-precision, non-flammable, smokeless metal-oxide film resistor
- Battery check
- Fuse and diode circuit protection

Bandwidth : 30~100kHz (AC10V), 30~20kHz (AC50V)

Optional accessories

Carrying case : C-CP

Clip adapter : CL-11, TL-81C



Function	Measuring range	Accuracy
DCV	0.25/2.5/10/50/250/500V (4kΩ/V)	±3% of full scale
ACV	10/50/250/500V (4kΩ/V)	±4% of full scale
DCA	0.25m/25m/500mA	±3% of full scale
Resistance	2k/20k/1MΩ	±3% arc
Load current (LI)	0~74mA/7.4mA/150μA	—
Battery check	0.9~1.5V	—
dB	-20~36dB	—
Bandwidth	30~100kHz (AC10V) 30~20kHz (AC50V)	
Battery	R6P×1	
Fuse	φ5.2×20mm (250V/0.5A)	
Size / Weight	H119×W85×D23mm/approx. 140g	
Standard accessories included	Test lead (TL-84), Instruction manual	

*1 The value in () at DCV and ACV is input resistance.



AP33

Small pocket size

- Elastomer material absorbs shock from fall
- High-durability nylon-woven copper lead
- Using elastomer material improves flexibility and reduces the stress on the lead wire and the probe when bent.

Bandwidth : 40~10kHz (50V and below)

Safety : IEC61010 CAT 300V CAT 500V

Optional accessories

Clip adapter : CL-15



Function	Measuring range	Accuracy
DCV	10/50/250/500V (2kΩ/V)	±5% of full scale
ACV	50/250/500V (2kΩ/V)	±5% of full scale
Battery check	1.5V/9V	—
DCA	25m/250mA	±5% of full scale
Resistance	5k/500kΩ	±3% arc
Bandwidth	40~10kHz (less than 50V)	
Battery	R03×1	
Fuse	φ5×20mm (250V/0.5A)	
Size / Weight	H126×W87×D33mm/approx. 185g	
Standard accessories included	Instruction manual	

*1 The value in () at DCV and ACV is input resistance.

For power line



VS-100 (with case)

Current-limiting fuse, 100kA breaking capacity, is installed.

- For lower voltage circuit (500V and below) with large capacitance
- Current-limiting fuse that can interrupt 100kA, is installed.
- All ranges are protected from input voltage upto 500V
- Carrying case

Bandwidth : 40~10kHz (50V and below)



Function	Measuring range	Accuracy
DCV	10/50/250/500V (4kΩ/V)	±3% of full scale
ACV	10/50/250/500V (4kΩ/V)	±3% of full scale
Resistance	2k/20k/2MΩ	±3% arc
Bandwidth	40~10kHz (less than AC50V)	
Battery	R6P×2	
Fuse	Current-limiting fuse 600V/3A, Breaking capacity 100kA Glass-tube fuse φ6.3×30mm 0.25A/250V, Breaking capacity 100A	
Size / Weight	H144×W96×D56mm/approx. 400g	
Standard accessories included	Test lead (TL-100-0M), Carrying case (C-VS), Instruction manual	

*1 The value in () at DCV and ACV is input resistance.