

## Drop shock proof meter



## SP21

## Continuity check buzzer

- Drop shock proof taut-band meter
- $\pm$ DCV zero center meter
- Fuse and diode protection
- Battery check
- Tilt stand

Bandwidth : 40~100kHz (AC12V)

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

## Optional accessories

HV probe : HV-20

Carrying case : C-SPH or C-SP

Clip adapter : CL-11, TL-8IC, CL-15

Test lead : TL-21M, TLF-120



Function	Measuring range	Accuracy
DCV (NULL)	0.3 (5k $\Omega$ )/3/12/30/120/600V (20k $\Omega$ /V) $\pm$ 6/30V (20k $\Omega$ /V)	$\pm$ 3% of full scale $\pm$ 3% of full scale
ACV	12/30/120/300/600V	$\pm$ 3% of full scale
DCA	60 $\mu$ /30m/0.3A	$\pm$ 3% of full scale
Resistance	2k/20k/2M $\Omega$	$\pm$ 3% of arc
Capacitance	500 $\mu$ F	*1
Continuity	Buzzer sounds at less than approx. 10 $\Omega$ . Open voltage: 3V	
Bandwidth	40~100kHz (AC12V)	
Battery	R6P $\times$ 2	
Fuse	$\phi$ 6.3 $\times$ 30mm (250V/0.5A)	
Size / Weight	H144 $\times$ W99 $\times$ D41mm/approx. 270g	
Standard accessories included	Test lead (TL-21), Instruction manual	

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

\*1 Pointer indication of the maximum move by charged current in the capacitor.



## SP20

## DC high voltage &amp; temperature measurable

- 20ch measurement ranges
- Capacitance measurement 500 $\mu$ F
- 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-8IC

Test lead : TLF-120



Function	Measuring range	Accuracy
DCV	0.25/2.5/10/50/100V (20k $\Omega$ /V)/500V (9k $\Omega$ /V)	$\pm$ 3% of full scale
ACV	10/50/250/500V (9k $\Omega$ /V)	$\pm$ 3% of full scale
DCA	50 $\mu$ /2.5m/25m/0.25A	$\pm$ 3% of full scale
Resistance	2k/20k/200k/2M $\Omega$	$\pm$ 3% of arc
Capacitance	500 $\mu$ F	*1
DC high voltage	DC25kV (Optional probe "HV-10" is necessary)	—
Temperature	-20 ~ +200°C (Optional probe "T-THP" is necessary)	$\pm$ 3% (T-THP)
Bandwidth	40~100kHz (AC10V)	
Battery	R6P $\times$ 2	
Fuse	$\phi$ 6.3 $\times$ 30mm (250V/0.5A)	
Size / Weight	H144 $\times$ W99 $\times$ D41mm/approx. 270g	
Standard accessories included	Test lead (TL-61), Instruction manual	

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

\*1 Pointer indication of the maximum move by charged current in the capacitor.



## SP-18D

## Protective body cover

- Low power ohm (3V) measurement upto 200M $\Omega$
- Capacitance measurement 0.01 $\mu$ F~1000 $\mu$ F
- 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-8IC



Function	Measuring range	Accuracy
DCV	0.3/3/12/30/120/600V (20k $\Omega$ /V)	$\pm$ 3% of full scale
ACV	12/30/120/300/600V (9k $\Omega$ /V)	$\pm$ 3% of full scale
DCA	60 $\mu$ /30m/0.3A	$\pm$ 3% of full scale
Resistance	2k/20k/2M/200M $\Omega$	$\pm$ 3% of arc
Battery check	1.5V/1.5V Coin battery	—
Capacitance	1000 $\mu$ F	*1
Bandwidth	30~80kHz (AC 12V) 30~20kHz (AC 30V)	
Battery	R6P $\times$ 2	
Fuse	$\phi$ 5.2 $\times$ 20mm (250V/0.5A)	
Size / Weight	H159.5 $\times$ W129 $\times$ D41.5mm / approx. 320g	
Standard accessories included	Instruction manual	

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

\*1 Pointer indication of the maximum move by charged current in the capacitor.



## TA55

## 30A range for automotive

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

Bandwidth : 40~5kHz

## Optional accessories

Clamp probe : CL33DC

Carrying case : C-SPH or C-SP

Clip adapter : CL-11, TL-8IC

Test lead : TL-91M, TLF-120



Function	Measuring range	Accuracy
DCV	0.3/3/16/30/60V (20k $\Omega$ /V)	$\pm$ 3% of full scale
ACV	30/120/300V (9k $\Omega$ /V)	$\pm$ 4% of full scale
DCA	0.5/3/30A	$\pm$ 5% of full scale
Resistance	2k/20k/200k/2M $\Omega$	$\pm$ 3% of arc
Continuity	Buzzer sounds at less than approx. 10 $\Omega$ . Open voltage : 3V	
Bandwidth	40~5kHz	
Battery	R6P $\times$ 2	
Fuse	$\phi$ 6.3 $\times$ 30mm (250V/3A)	
Size / Weight	H142 $\times$ W97 $\times$ D38mm/approx. 300g	
Standard accessories included	Test lead (TL-91), Instruction manual	

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