

## FET Tester



CE

## EM7000

High sensitivity for measurement of lower capacitance

- High input impedance (DCV2.5~12M $\Omega$ /V), and 0.12 $\mu$ A range (DCA)
- Bandwidth 40Hz~1MHz AC sign wave
- Rectangular pulse P-P (Peak to Peak) measurement (duty cycle 20% and above)
- Wide ohm range 0.2 $\Omega$ ~200M $\Omega$

Bandwidth : 40Hz~1MHz (12V range and below)  
Safety : IEC61010-1 (EN61010-1) 2001-02 CAT $\text{\textcircled{C}}$  600V Max.

## Optional accessories

HV probe : HV-50  
Carrying case : C-CA  
Clip adapter : CL-11, TL-8IC, CL-15  
Test lead : TL-21M, TLF-120



| Function                      | Measuring range   | Accuracy                |
|-------------------------------|---|-------------------------|
| DCV                           | 0.3/1.2/3/12/30/120/300/1000V   | $\pm 3\%$ of full scale |
| $\pm$ DCV                     | $\pm 0.15/0.6/1.5/6/15/60/150/600V$   | $\pm 7\%$ of full scale |
| ACV rms (50 / 60Hz)           | 3V (approx. 2.5M $\Omega$ )/12V (approx. 1.1M $\Omega$ )<br>30V (approx. 800k $\Omega$ )/120/300V (approx. 800k $\Omega$ )/750V (approx. 10M $\Omega$ ) | $\pm 3\%$ of full scale |
| ACV P-P                       | Sine wave: 8.4V (approx. 2.5M $\Omega$ )/33V (approx. 1.1M $\Omega$ )/84V (approx. 800M $\Omega$ )/330/840V (approx. 800k $\Omega$ )                    | $\pm 5\%$ of full scale |
| DCA                           | Square symmetric wave: 8.4V (2.5M $\Omega$ /V)<br>Triangular symmetric wave: 8.4V (2.5M $\Omega$ /V)  | $\pm 6\%$ of full scale |
| DCA (NULL)                    | 0.12 $\mu$ /0.3m/3m/30m/300m/6A   | $\pm 4\%$ of full scale |
| ACA                           | $\pm 0.06\mu$ / $\pm 0.15m$ /1.5m/15m/150mA   | $\pm 7\%$ of full scale |
| Resistance                    | 2k/20k/200k/2M/20M/200M $\Omega$  | $\pm 3\%$ of arc        |
| dB                            | -10~+51dB   | $\pm 3\%$ of arc        |
| Bandwidth                     | 40Hz~1MHz (below 12V range)   |                         |
| Battery                       | R6P 1.5V $\times$ 2, 6F22 9V $\times$ 1   |                         |
| Fuse                          | $\phi 5.0$ $\times$ 20mm ceramic (250V / 0.5A)<br>$\phi 5.0$ $\times$ 20mm ceramic (250V / 6.3A)  |                         |
| Size / Weight                 | H165 $\times$ W106 $\times$ D46mm / approx. 375g  |                         |
| Standard accessories included | Test lead (TL-21), Spare fuse, Instruction manual   |                         |

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

## Multifunctional model



CE

## CX506a

Capacitor & Transistor checker (built-in oscillator)

- 26ch switch, wide range measurement
- Capacitance measurement 50pF~2000 $\mu$ F
- High input impedance 50k $\Omega$  / V (DC3~300V range)
- Switchable DC polarity

Bandwidth : 40Hz~30kHz (3V and 12V),  
40Hz~10kHz (30V range)

Safety : IEC61010-1 (EN61010-1) 2001-02 CAT $\text{\textcircled{C}}$  600V Max.

## Optional accessories

HV probe : HV-50  
Carrying case : C-CA  
Clip adapter : CL-11, TL-8IC, CL-15  
Test lead : TL-21M, TLF-120



| Function                              | Measuring range   | Accuracy  |
|---------------------------------------|---|---|
| DCV                                   | 120m (4k $\Omega$ )/3/12/30/120<br>300 (50k $\Omega$ /V)/1000V (15k $\Omega$ )    | 120m : $\pm 4\%$<br>$\pm 2.5\%$ of full scale                 |
| ACV                                   | 3/12/30/120/300/750V (8k $\Omega$ /V)   | $\pm 3\%$ of full scale<br>(Less than 12V range : $\pm 4\%$ ) |
| DCA                                   | 30 $\mu$ /0.3m/3m/30m/0.3A  | $\pm 2.5\%$ of full scale                                     |
| Resistance                            | 5k/50k/500k/5M/50M $\Omega$   | $\pm 3\%$ of arc  |
| Capacitance                           | C1 : 50p~0.2 $\mu$ F C2 : 0.01 $\mu$ ~20 $\mu$ F<br>C3 : 1~2000 $\mu$             | C1/C2<br>$\pm 6\%$ of arc                                     |
| hFE (DC Current Amplification Factor) | Transistor hFE: 0~1000  | -   |
| Bandwidth                             | 40~30kHz (12V/40Hz~30kHz 30V~ : 40Hz~10kHz)                                       |   |
| Battery                               | R6P $\times$ 2, 6F22 $\times$ 1   |   |
| Fuse                                  | $\phi 5.0$ $\times$ 20mm (250V/0.5A) arc-extinguishing material in ceramic tube   |   |
| Size / Weight                         | H165 $\times$ W106 $\times$ D46mm/ approx. 370g                                   |   |
| Standard accessories included         | Test lead (TL-21), Alligator Clip lead (CL-506)<br>Instruction manual, Spare fuse |   |

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

## YX-361TR

Wide measurement range

- Total 35 wide ranges (24ch sw + additional functions)
- $\pm$ DCV zero center meter
- LED for continuity check
- OUTPUT terminal (series capacitor terminal)
- Battery check

## Optional accessories

HV probe : HV-10  
Carrying case : C-YS  
Clip adapter : CL-11, TL-8IC  
hFE probe : HFE-6



| Function                      | Measuring range   | Accuracy   |
|-------------------------------|---|--|
| DCV (NULL)                    | 0.1/0.5/2.5/10/50/250/1000V (20k $\Omega$ /V)<br>$\pm 5$ /25V (40k $\Omega$ /V) | $\pm 2.5\%$ of full scale<br>$\pm 2.5\%$ of full scale |
| ACV                           | 2.5/10/50/250/1000V (9k $\Omega$ /V)  | $\pm 3\%$ of full scale<br>(3V : $\pm 5\%$ )           |
| DCA                           | 50 $\mu$ /2.5m/25m/0.25A  | $\pm 2.5\%$ of full scale                              |
| Resistance                    | 2k/20k/200k/2M/20M $\Omega$   | $\pm 3\%$ of arc                                       |
| dB                            | -10~+62dB   | $\pm 3\%$ of full scale<br>(3V : $\pm 5\%$ )           |
| Continuity                    | LED : emitting light at 10 $\Omega$ or less. Open voltage : 3V                  |  |
| Battery check                 | 1.5V  |  |
| Bandwidth                     | 40~30kHz (less than 30V : $\pm 3\%$ ) 30~100kHz (less than 30V : $\pm 1$ dB)    |  |
| Battery                       | R6P $\times$ 2, 6F22 $\times$ 1   |  |
| Fuse                          | $\phi 5.2$ $\times$ 20mm (250V / 0.5A)  |  |
| Size / Weight                 | H150 $\times$ W100 $\times$ D37mm / approx. 290g                                |  |
| Standard accessories included | Test lead (TL-61), Instruction manual   |  |

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

## Multifunctional model



## SH-88TR

Zero center meter (NULL)

- Total 35 wide ranges (22ch sw + additional functions)
- Capacitance measurement 1 $\mu$ F~1F
- LED for continuity check

## Optional accessories

HV probe : HV-10  
Carrying case : C-YS  
Clip adapter : CL-11, TL-8IC  
hFE probe : HFE-6



| Function                      | Measuring range   | Accuracy   |
|-------------------------------|---|--|
| DCV (NULL)                    | 120m/3/12/30/120/300/1200V (20k $\Omega$ /V)<br>$\pm 6$ /15/60/150/600V (40k $\Omega$ /V) | $\pm 2.5\%$ of full scale<br>$\pm 2.5\%$ of full scale |
| ACV                           | 3/12/30/120/300/1200V (9k $\Omega$ /V)  | $\pm 3\%$ of full scale<br>(3V : $\pm 5\%$ )           |
| DCA                           | 50 $\mu$ /3m/30m/0.3A   | $\pm 2.5\%$ of full scale                              |
| Resistance                    | 3k/30k/300k/3M/30M $\Omega$   | $\pm 3\%$ of arc                                       |
| dB                            | -10~+63dB   | $\pm 3\%$ of full scale<br>(3V : $\pm 5\%$ )           |
| Capacitance                   | 1000 $\mu$ /0.01/0.1/1F   |  |
| Continuity                    | LED : emitting light at 10 $\Omega$ or less. Open voltage : 3V                            |  |
| Bandwidth                     | 40~30kHz (less than 30V : $\pm 3\%$ ) 30~100kHz (less than 30V : $\pm 1$ dB)              |  |
| Battery                       | R6P $\times$ 2, 6F22 $\times$ 1   |  |
| Fuse                          | $\phi 5.2$ $\times$ 20mm (250V/0.5A)  |  |
| Size / Weight                 | H150 $\times$ W100 $\times$ D36mm/ approx. 280g   |  |
| Standard accessories included | Test lead (TL-61), Instruction manual   |  |

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

## High input impedance

AU-32  
AU-31

Auto range, High input impedance

- Auto range selection (V,  $\Omega$ )
- Auto polarity
- High input impedance 1~10M $\Omega$
- Series capacitor input  $\text{\textcircled{A}}$ AU-31 ACV only
- Auto 0 $\Omega$  adjustment
- Inner battery check
- DC / AC auto selection  $\text{\textcircled{A}}$ AU-32 only
- 5 ranges DC / AC current  $\text{\textcircled{A}}$ AU-32 only

Bandwidth : 40~10kHz (0.25V :  $\pm 5\%$ ), 40~600Hz  
(2.5V and above :  $\pm 5\%$ )  
: 40~10kHz (0.3V :  $\pm 5\%$ ), 40~1kHz  
(3V and above :  $\pm 4\%$ )

## Optional accessories

HV probe : HV-50  
Carrying case : C-SP  
Clip adapter : CL-11, TL-8IC



AU-32



| AU-32                         | Measuring range  | Accuracy                |
|-------------------------------|--|-------------------------|
| DCV                           | $\pm 250m$ (approx. 1M $\Omega$ /V)/2.5/10/50/250/500V (10M $\Omega$ /V) | $\pm 3\%$ of full scale |
| ACV                           | 250m (approx. 1M $\Omega$ /V)/2.5/10/50/250/500V (10M $\Omega$ /V)       | $\pm 3\%$ of full scale |
| DCA                           | $\pm 250\mu$ /2.5m/25m/250m/2.5A   | $\pm 3\%$ of full scale |
| ACA                           | 250 $\mu$ /2.5m/25m/250m/2.5A  | $\pm 3\%$ of full scale |
| Resistance                    | 20k/200k/2M/20M/200M $\Omega$  | $\pm 3\%$ of arc        |
| dB                            | -10/+10/+22/+36/+50/+56dB  | -                       |
| Bandwidth                     | 40~10kHz (0.25V : $\pm 5\%$ ), 40~600Hz (2.5V~ : $\pm 5\%$ )             |                         |
| Battery                       | R03 $\times$ 4   |                         |
| Fuse                          | $\phi 5.2$ $\times$ 20mm (250V/0.3A)                                     |                         |
| Size / Weight                 | H48 $\times$ W110 $\times$ D124mm/ approx. 290g                          |                         |
| Standard accessories included | Test lead (TL-61), Instruction manual                                    |                         |

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

| AU-31                         | Measuring range   | Accuracy                |
|-------------------------------|---|-------------------------|
| DCV                           | $\pm 300m$ (approx. 1M $\Omega$ /V)/3/12/60/300/1000V (10M $\Omega$ /V) | $\pm 3\%$ of full scale |
| ACV                           | 300m (approx. 1M $\Omega$ /V)/3/12/60/300/1000V (10M $\Omega$ /V)       | $\pm 3\%$ of full scale |
| DCA                           | $\pm 300m$ /3A  | $\pm 3\%$ of full scale |
| ACA                           | 300m/3A   | $\pm 3\%$ of full scale |
| Resistance                    | 20k/200k/2M/20M/200M $\Omega$   | $\pm 3\%$ of arc        |
| dB                            | -9/+11/+23/+37/+51/+62dB  | -                       |
| Bandwidth                     | 40~10kHz (0.3V : $\pm 5\%$ ) 40~1kHz (3V~ : $\pm 4\%$ )                 |                         |
| Battery                       | R03 $\times$ 4  |                         |
| Fuse                          | $\phi 5.2$ $\times$ 20mm (250V/0.5A)                                    |                         |
| Size / Weight                 | H48 $\times$ W110 $\times$ D124mm/ approx. 290g                         |                         |
| Standard accessories included | Test lead (TL-61), Instruction manual                                   |                         |

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

## Drop shock proof meter

## YX360TRF

Best seller drop shock proof meter

- Drop shock proof meter
- Null (zero center) meter  $\pm 5$  /  $\pm 25$  in DCV
- High resistance up to 200M $\Omega$  with low voltage
- Protective body cover
- Capacitance, dB, Li measurement

Bandwidth : 30~100kHz (AC10V)

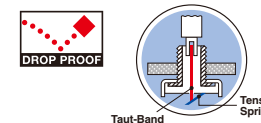
Safety : IEC61010-1 (EN61010-1) 2001-02 CAT $\text{\textcircled{C}}$  600V Max. / CAT $\text{\textcircled{C}}$  1000VDC / 750VAC Max.

## Optional accessories

hFE probe : HFE-6T  
Clip adapter : CL-11, TL-8IC  
High voltage probe : HV-10T



CE



| Function                      | Measuring range   | Accuracy  |
|-------------------------------|---|---|
| DCV (NULL)                    | 0.1V (20k $\Omega$ / V)<br>0.25/2.5/10/50 (20k $\Omega$ / V) / 250/1000V(9k $\Omega$ / V)<br>$\pm 5$ / 25V (40k $\Omega$ / V) | $\pm 5\%$ of full scale<br>$\pm 5\%$ of full scale<br>$\pm 5\%$ of full scale |
| ACV                           | 10 / 50 / 250 / 750V (9k $\Omega$ / V)  | $\pm 4\%$ of full scale   |
| DCA                           | 50 $\mu$ / 2.5m / 25m / 0.25A   | $\pm 5\%$ of full scale   |
| Resistance                    | 2k / 20k / 200k / 2M $\Omega$ (X1) / X10 / X100 / X1k<br>200M $\Omega$ (X100k)  | $\pm 3\%$ of arc<br>$\pm 5\%$ of arc  |
| Load current (LI)             | 0~150m / 15m / 1.5m / 150 $\mu$ / 1.5 $\mu$ A   |   |
| Capacitance                   | 10 $\mu$ F  | *2  |
| dB                            | -10dB~+22dB (for 10VAC) ~+62dB  | -   |
| DC high voltage               | DC25kV (optional probe "HV-10T" is necessary)   | -   |
| hFE                           | 1000 at X10 range (optional probe "HFE-6T" is necessary)  | -   |
| Battery                       | R6 (IEC) or UM-31.5V $\times$ 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, Test lead (TL-61T), Hand strap  |   |

The value in bracket at DCV and ACV is input resistance.

\*1 Not including the resistance of fuse.

\*2 Pointer indication of the maximum move by charged current in the capacitor.