Usefulness-Safety-Compactness

# DC/AC DIGITAL CLAMP METERS!!

CE Mark Approved

SK-7682

DC/AC 400A + DC/AC 600V + Hz + %

True RMS

for Electrical Appliances and Apparatus, also for Motorcars!!

This is a very compact, lightweight, useful DC/AC Clamp Meter.
No range selection is required.

- Various Uses Maintenance of Electric equipments and Automobiles.
- Autoranging DC/AC Digital Clamp Meter
- 4 digit LCD Easy to read LCD with 12 mm numerals, units and symbols.
- Safety Design

  CE Mark is approved, complied with EMCD and LVD

  (IEC 1010-01).
- Auto Power Off Auto Power Off prevents the battery consumption.
- Display Hold This function helps you when measuring in a dark or dangerous spot.

- Advanced Functions
  - Peak Hold: -- 400A
  - Max/Min Measurements
  - Difference Measurements
  - Display Hold



SK-7682 CE RMS

# ADVANCED DC/AC DIGITAL CLAMP METERS !!

The SK-7682 is a micro-computer controlled, autoranging DC/AC Digital Clamp Meter (True RMS) with 4 digit LCD. It is a slimly compact, lightweight, useful Clamp Meter for testing and maintaing multifarious electrical appliances, aparatus, factory equipments and facilities. It is also a very easy to use as an Automotive Clamp Meter for testing/repairing electric systems of motorcars.

The instrument presents the reliability and convenience for the users in the field of electrical and automobile industries.

#### 4 DIGIT LCD

Easy to read LCD with 12 mm numerals, units and various symbols.

# ■ADVANCED TESTING **FUNCTIONS**

Higher class testing functions such as Peak Hold, Max/Min and Difference measurements available are by each Keyswitch.

#### **AUTO POWER OFF**

LCD is automatically turned off under Power Off condition after 12 minutes of power on. Battery consumption is prevented when power off is forgot.

#### EASY OPERATION

Measuring element and function are arranged reasonably with Slideswitches and Keyswitches.

#### SAFETY DESIGN

SK-7682 has been designed with user's safety in mind, and CE Mark is approved complied with EMCD and LVD (IEC 1010-01)

## AS AN AUTOMOTIVE **CLAMP METER**

You can measure Peak Current of Battery when Starter starts, Charge and Discharge Current and its Max/Min.

#### **■ GENERAL SPECIFICATIONS**

- - a. Numerical Display; 4000 count LCD, Max. reading(4050), 12mm high. b. Units and Symbols; A, mV, V, Hz, %, ..., -, ~, AUTO, BAT, APO, DH, PH, DIFF, MAX, MIN, OL and decimal point.
- 2. OPERATING PRINCIPLE : ∑ ∠ conversion.
- 3. SAMPLING RATE: 3 times/sec.
- 4. RANGE SELECTION: Autoranging.
- 5. POLARITY: Autopolarity, symbol when minus, + symbol is implied.
- 6. OVERRANGE INDICATION: OL symbol is shown. (no symbol on == / ~600V)
- 7. BATTERY WARNING: BAT symbol is shown.
- 8. DISPLAY HOLD: Display is held by DH Key.
- 9. MAX/MIN: Max. and Min. Values are measured by using MAX/MIN Key.
- 10. PH (Peak Hold): Current; up to --- 400A Peak. Peak Value is measured at 10m sec.
- 11. DIFF: Difference Measurements can be made by DIFF Key. Desired value being measured is stored and converted to read zero on LCD and only difference is shown with proceeding measurements. When random digits remain on A or V measurements, they can be zeroed by this Key.
- 12. OVERLOAD PROTECTION:
  - a. Current; ~/ == 700A (600V Line).
  - b. Voltage; ~/ == 1000V.
- 13. OPERATING TEMPERATURE & HUMIDITY:

0°C to 40°C, less than 80% RH in non-condensing.

- 14. STORAGE TEMPERATURE & HUMIDITY:
  - -20°C to 60°C, less than 70% RH in non-condensing.
- 15. DIELECTRIC STRENGTH: 3.7kV (Sine Wave) for one minute.

(between Case and Input Terminals).

- 16. SAFETY LEVEL: IEC-1010-1 Overvoltage Category III. 300V, EMCD test passed.
- 17. POWER SUPPLY: Two 1.5V R6P(or AA) batteries.
- 18. POWER CONSUMPTION: less than 10mA, approx. 90 hours continuous operation.
- 19. AUTO POWER OFF: Power is automatically turned off after about 12 minutes on. **NOTE**: SK-7682 consumes  $1 \sim 2 \mu A$  under Auto Power OFF condition.
- 20. CONDUCTOR DIAMETER:  $19mm \phi$ .
- 21. DIMENSIONS & WEIGHT: 196(H) × 59(W) × 30(D)mm, 180g.

# ■ MEASUREMENT SPECIFICATIONS

(23°C±5°C, less than 80% RH in non-condensing)

#### 1. Current Measurements ( -- A/~ A/ Hz / % )

#### 1-1. DC Current ( == A )

Range	Accuracy	Resolution	Maximum Input	
40.00A	±1.5%rdg±3dgt	0.01A	100000000000000000000000000000000000000	
400.0A	40A~200A:±2.0%±3d 200A~400A:±4.0%±3d	0.1A	400A DC	

#### 1-2. AC Current ( ~ A )

True RMS

Range	Accuracy(50/60Hz)(>0.5A)	Resolution	Maximum Input
40.00A	±1.5%rdg±5dgt	0.01A	
400.0A	36.0A~200A:±2.0%±5d 200.0A~400A:±5.0%±5d	0.1A	400A AC

40Hz~400Hz: 40A; add 0.5%, 400A; add 1%. Crest Factor: 200 A > ; 3, 200A~400A; 1.5

#### 1-3. Frequency (Hz)

Range	Accuracy	Resolution	Input Sensitivity	Maximum Input
5.00Hz~49.99Hz	±0.2%rda	10m Hz		
50.0Hz~499.9Hz	±2dat	100m Hz	10A rms	400A rms
0.500kHz~1.000kHz	±zugi	1 Hz		

1-4. Duty Cycle (%)

Not specified

#### 1-5, Peak Hold ( = A FUNCTION)

Range	Accuracy	Resolution	Maximum
400.0A	$\pm 5.0\%$ rdg $\pm 5$ dgt	0.1A	400A DC

# 2. Voltage Measurements (= V/~V/Hz/%)

#### 2-1. DC Voltage ( ... V )

Range	Accuracy	Resolution	Input Impedance	Maximum
400.0mV	±1.0%rdg±3dgt	0.1 mV	≥100MΩ	
4.000 V		1 mV	≒11 MΩ	
40.00 V	±1.0%rda±2dat	10 mV	8 190 BBB	600V DC
400.0 V	±1.0%109±2090	100 mV	≒10 MΩ	
600.0 V		1 V		

# 2-2. AC Voltage (~V)

True RMS

Range	Accuracy(>0.1V)	Resolution	Input Impedance	Maximum
4.000 V	±1.5%rdg±5dgt (40~400Hz)	1 mV	≒11MΩ	
40.00 V		10 mV		CONVAC
400.0 V		100 mV	≒10MΩ	600V AC
600 V		1 V		

Clest Factor: 3

#### 2-3. Frequency (Hz)

Range	Accuracy	Resolution	Input Sensitivity	Maximum Input
1.000Hz~4.999Hz		1 mHz		
5.00Hz~49.99Hz	±0.2%rdg	10 mHz	21/	2001/
50.0Hz~499.9Hz	±2dat	100 mHz	3V IIIIS	300V mis
0.500kHz~4.999kHz	,	1 Hz	6	
5.00kHz~49.99kHz	į.	10 Hz		

#### 2-4. Duty Cycle (%)

Range	Accuracy	Resolution	Input Sensitivity	Maximum Input	Frequency Range
0.0% ~99.9%	±0.5%rdg ±5dgt	0.1%	3V rms	600V rms	1Hz~1kHz

\* Specifications are subject to change without notice.

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