

Advanced DIGITAL CLAMP METERS up to 2000A !!

★ Now presenting 3 new models of True RMS ★

CE Mark Approved

SK-7706 Specifications

- ◆ **Sampling Rate :**
1000 times per second.
- ◆ **2 Channel Multiple Display :**
(ex.)
DC Current + DC Voltage.
Occurrence Time of Maximum +
Occurrence Time of Minimum.
- ◆ **MAX/MIN/AVG :**
Max/Min Value provided with
the Occurrence Time of Each
Measuring Value.
Average Value is the average
of accumulated amount.
- ◆ **Peak Hold :**
Peak Measurements are
available at :
1m sec, 10m sec,
100m sec.
- ◆ **OUTPUT Terminals :**
Capable of outputting to
Oscilloscopes or Recorders.



Large LCD :
Easy to see!
Easy to read!

★ Clamp Meter with
High Performance ★

SK-7706

2000A AC/DC
600V AC/DC (CAT.Ⅲ)

★ Clamp Meters for
General Purposes ★

SK-7708

2000A AC/DC
600V AC/DC (CAT.Ⅲ)

SK-7640

2000A AC
600V AC/DC (CAT.Ⅲ)

SK-7708



SK-7640



● GENERAL SPECIFICATIONS

	SK-7706	SK-7708	SK-7640
Numerical Display	4000count, Max9999, 10mm High.	4000count, Max5120, 14mm High.	3 3/4 digit LCD, Maximum4000 Count, 14mm High.
Operating Principle	Successive Approximation A/D Conversion.	Σ/Δ Conversion.	Σ/Δ Conversion.
Measuring Principle	True RMS	True RMS.	True RMS.
Sampling Rate	1000times/sec. Display ; 1 time/sec.	3times/sec.	3times/sec.
Range Selection	Auto/Manual, Combined Range Selection.	Autorangeing and Manual-ranging.	Autorangeing and Manual-ranging.
Polarity	Auto Polarity, - symbol when minus,	Auto Polarity, - symbol when minus,	Auto Polarity, - symbol when minus,
Overload Indication	OL symbol is shown and buzzer sounds.	OL symbol is shown.	OL symbol is shown.
Battery Warning	"BAT" symbol is shown.	"BAT" symbol is shown.	"BAT" symbol is shown.
Display Hold	Display is held by DH key.	Display is held by DH key.	Display is held by DH key.
Max/Min/Avg	○ (250m sec) Occurrence Times displayed.	○ (250m sec)	○ (250m sec)
Peak Hold	○ (1m, 10m, 100m sec)	○ (10m sec)	○
Diff	○	○	○
Continuity Test	Buzzer sounds less than approx.100 Ω .	Buzzer sounds less than approx.50 Ω .	Buzzer sounds less than approx.50 Ω .
Diode Test	○	○	○
Overload Protection	a. Current ; $\sim/=/$ 3000A rms for one minute. b. Voltage ; $\sim/=/$ 1200V rms for one minute. c. Resistance; $\sim/=/$ 600V rms for one minute.	a. Current ; $\sim/=/$ 3000A rms for one minute. b. Voltage ; $\sim/=/$ 1200V rms for one minute. c. Resistance; $\sim/=/$ 300V rms for one minute.	a. Current ; $\sim/=/$ 2400A rms for one minute. b. Voltage ; $\sim/=/$ 1000V rms for one minute. c. Resistance; $\sim/=/$ 300V rms for one minute.
Dielectric strength	AC5.55kV for 1minute.	AC5.55kV for 1minute.	AC5.6kV for 1minute.
Operating Temp. & Humidity	0°C~40°C, less than 80% in non-condensing.	0°C~40°C, less than 80% in non-condensing.	0°C~40°C, less than 80% in non-condensing.
Storage Temp. & Humidity	-20°C~60°C, less than 70% in non-condensing.	-20°C~60°C, less than 70% in non-condensing.	-10°C~50°C, less than 70% in non-condensing.
Safety Level	CE Mark authorized. IEC-1010-01 CAT III 600V of LVD, EMC Test passed.	CE Mark authorized. IEC-1010-01 CAT III 600V of LVD, EMC Test passed.	CE Mark authorized. IEC-1010-1 CAT III 600V of LVD, EMC Test passed.
Power Supply	9V 6F22 (S-006P) Battery	9V 6F22(S-006P or 6LR6) Battery	9V 6F22 Battery.
Power Consumption	less than 180mW, approx. 15 hours continuous operation.	less than 90mW. approx.30 hours continuous operation.	Approx. 3mA (100 hours continuous operation.)
Auto Power Save	Approx. 10minutes.	Approx. 12minutes.	Approx.12minutes.
Conductor Diameters	55mm ϕ , Bus Bar: 10 × 65mm, 20 × 60mm	55mm ϕ , Bus Bar: 10 × 65mm, 20 × 60mm	55mm ϕ , Bus Bar: 10 × 55mm, 20 × 60mm
Dimensions & Weight	250 × 92 × 39mm, 500g	250 × 92 × 39mm, 500g	250 × 95 × 39mm, 470g

● MEASUREMENT SPECIFICATIONS

SK-7706

- DC Current + DC Voltage**

Range	Resolution	Accuracy
400.0 A	100 mA	$\pm 1.5\%rdg \pm 3dgt$
2000 A	1 A	
40.00 V	10 mV	
400.0 V	0.1 V	$\pm 1.0\%rdg \pm 3dgt$
600 V	1 V	
- AC Current + Frequency / Duty Cycle / Pulse Width / True RMS (AC Coupling)**

Range	Resolution	Accuracy (50Hz~1kHz)
400.0 A	100mA	$\pm 1.5\%rdg \pm 3dgt$
2000 A	1 A	
10.0Hz~100Hz	0.1 Hz	
1000Hz	1 Hz	$\pm 0.2\%rdg \pm 2dgt$
10.0kHz	10 Hz	
25.0kHz	100 Hz	
%	1%~99%	$\pm 5\%rdg \pm 2dgt$
mS	0.1mS~100.0mS	$\pm 5\%rdg \pm 2dgt$

Crestfactor : less than 3 (400.0A Range), less than 1.5. (2000A Range)
- AC Voltage + Frequency / Duty Cycle / Pulse Width / True RMS (AC Coupling)**

Range	Resolution	Accuracy (50Hz~1kHz)
40.0 V	10 mV	
400.0 V	0.1 V	$\pm 1.5\%rdg \pm 3dgt$
600 V	1 V	
10.0Hz~100Hz	0.1 Hz	
1000Hz	1 Hz	$\pm 0.2\%rdg \pm 2dgt$
10.0kHz	10 Hz	
25.0kHz	100 Hz	
%	1%~99%	$\pm 5\%rdg \pm 2dgt$
mS	0.1mS~100.0mS	$\pm 5\%rdg \pm 2dgt$

Crestfactor : less than 3, less than 2 (600V)
Effective Frequency of Duty Cycle and Pulse Width : 10Hz~1kHz.
- Peak Hold ~ A (Current)**

Range	Resolution	Accuracy
400.0A	0.1A	
3000A	1A	$\pm 5\%rdg \pm 5dgt$
- ~ V (Voltage)**

Range	Resolution	Accuracy
40.00V	0.01V	
400.0V	0.1V	$\pm 5\%rdg \pm 5dgt$
1000V	1V	
- 5. k Ω (Resistance)**

Range	Resolution	Accuracy
4.00k Ω	1 Ω	
40.0k Ω	10 Ω	$\pm 1.0\%rdg \pm 2dgt$
- 6. \cdot (Continuity Test)**

Range	Buzzer	Accuracy
4.00k Ω	< \leq 100 Ω	$\pm 1.0\%rdg \pm 2dgt$
- 7. \rightarrow (Diode Test)**

Range	Resolution	Accuracy	Open Circuit Voltage
2.000V	1mV	$\pm 5\%rdg \pm 2dgt$	$\leq 3.5V$
- 8. °C (Temperature)**

Range	Accuracy	Resolution
-30°C~150°C	$\pm 2^\circ C$	$1^\circ C$

- Analog Output 1) ~ A + ~ V (DC Current + AC Current)**

Range	Accuracy	Output Voltage
400.0 A	$\pm 2.5\%rdg \pm 5dgt$	0.1mV/0.1A
2000 A		0.1mV/ 1A
40.00 V		0.1mV/10mV
400.0 V	$\pm 2.0\%rdg \pm 5dgt$	0.1mV/ 0.1V
600 V		0.1mV/ 1V

Both functions are converted in DC mV.
- 2) ~ A + Hz (AC Current + Hz)**

Range	Accuracy(50~1kHz)	Output Voltage
400.0A	$\pm 2.5\%rdg \pm 5dgt$	0.1mV/0.1A
2000A		0.1mV/ 1A

No output from Hz. True RMS in AC Coupling.
AC Current is converted and outputted in DC mV and also in waveform in AC mV.
- 3) ~ V + Hz (AC Voltage + Hz) (50~1kHz)**

Range	Accuracy	Output Voltage
40.00V	$\pm 2.0\%rdg \pm 5dgt$	0.1mV / 0.1V
400.0V		0.1mV / 1V
600 V		

No output from Hz. True RMS in AC Coupling. AC Voltage is converted and outputted in DC mV and in waveform in AC mV.

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- ~ A / ~ Hz · % (DC/AC Current / Hz / Duty Cycle)**

Range	Accuracy	Resolution	True RMS
400.0A	$\pm 1.5\%rdg \pm 5dgt$	0.1A	
2000 A		1 A	
400.0 A	$\pm 1.5\%rdg \pm 5dgt$ / (50/60Hz) $\pm 3\%rdg \pm 5dgt$ / (40~1kHz)	0.1 A	
2000 A	$\pm 1.5\%rdg \pm 5dgt$ (0~1000A:50/60Hz) $\pm 3\%rdg \pm 5dgt$ (0~1000A:40~1kHz) $\pm 3\%rdg \pm 5dgt$ ($\geq 1001A$:50/60Hz)	1 A	
- ~ Hz**

Range	Accuracy
1.000 Hz ~ 4.999Hz	
5.00 Hz ~ 49.99Hz	$\pm 0.2\%rdg \pm 2dgt$
50.0 Hz ~ 499.9Hz	
0.500kHz ~ 4.999kHz	
- %** Not specified.
- * Crestfactor : less than 3 ; 1000A~2000A ; less than 1.5.**
* Hz : Autorangeing only.
- 1) Peak Current**

Range	Accuracy	Resolution
~ A	2000A $\pm 5\%rdg \pm 10dgt$	1A
- 2. ~ V / ~ Hz · % (DC/AC Voltage / Hz / Duty Cycle)**

Range	Accuracy	Resolution
400.0 mV		0.1mV
4.000 V		1 mV
40.00 V	$\pm 1.2\%rdg \pm 3dgt$	10 mV
400.0 V		100mV
600 V		1 V
4.000 V		1mV
40.00 V	$\pm 1.5\%rdg \pm 5dgt$	10mV
400.0 V	$\pm 5\%rdg \pm 5dgt$	100mV
600 V	$\pm 5\%rdg \pm 5dgt$	1 V

	Range	Accuracy	Resolution
Hz	1.000Hz~4.999Hz		1 mHz
	5.00Hz~49.99Hz		10mHz
	50.0Hz~499.9Hz	$\pm 0.2\%rdg$	100mHz
	0.500kHz~4.999kHz		1 Hz
	5.00kHz~49.99kHz		10 Hz
%	0.1%~99.9%	$\pm 2\%rdg \pm 2dgt$	0.1 %
	%		

* Overload Protection : 1200V rms 1minute. * Hz : Autorangeing only
* Crestfactor : less than 3. 600V range ; less than 1.5.

	Range	Accuracy	Resolution
3. Ω (Resistance)	400.0 Ω	$\pm 1.5\%rdg \pm 5dgt$	0.1 Ω
	4.000 k Ω		1 Ω
	40.0 k Ω	$\pm 1.0\%rdg \pm 3dgt$	10 Ω
	400.0 k Ω		100 Ω
	4.000 M Ω	$\pm 3.0\%rdg \pm 4dgt$	1k Ω
	40.00 M Ω	$\pm 5.0\%rdg \pm 7dgt$	10k Ω

* Range selection : Auto / Manual-ranging.
* Overload Protection : 300V rms for 1minute.

	Range	Accuracy	Resolution
4. \cdot (Continuity Test)	Buzzer	$\pm 1.5\%rdg \pm 5dgt$	0.1 Ω
	400.0 Ω		

* Overload Protection : 300V rms for 1minute.

	Range	Accuracy	Resolution
5. \rightarrow (Diode Test)	0~1.5V	$\pm 5\%rdg \pm 5dgt$	1mV

	Range	Accuracy	Resolution
6. \rightarrow (Capacitance)	50.0 nF		10 pF
	500.0 nF		100 pF
	5.000 μ F	$\pm 5\%rdg \pm 10dgt$	1 nF
	50.00 μ F		10 nF
	100.0 μ F		100 nF

* Range selection : Autorangeing only.

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- ~ A · Hz · % (AC Current → Frequency → Duty Cycle)**

Range	Accuracy	Resolution	True RMS
400.0 A	$\pm 1.5\%rdg \pm 5dgt$ (50/60Hz) $\pm 3\%rdg \pm 5dgt$ (40~1kHz)	0.1A	
2000 A	$\pm 1.5\%rdg \pm 5dgt$ (0~1000A:50/60Hz) $\pm 3\%rdg \pm 5dgt$ (0~1000A:40~1kHz) $\pm 3\%rdg \pm 5dgt$ (1001A~1800A) $\pm 5\%rdg \pm 5dgt$ (1801A~2000A)	1 A	
- ~ Hz**

Range	Accuracy	Resolution
1.000Hz~4.999 Hz		1mHz
5.00 Hz~49.99 Hz	$\pm 0.2\%rdg$	10mHz
50.0 Hz~499.9 Hz	$\pm 2dgt$	100mHz
0.500kHz~4.999kHz		1 Hz
- %** Not specified.
- * Crest Factor : less than 3. 2000A : less than 1.5.**
* Hz : Autorangeing only.

- ~ V / ~ Hz · % (AC/DC Voltage → Frequency → Duty Cycle)**

Range	Accuracy	Resolution	True RMS
4.000 V		1 mV	
40.00 V	$\pm 1.5\%rdg \pm 5dgt$	10 mV	
400.0 V	$\pm 1.5\%rdg \pm 5dgt$	100mV	
600 V		1 V	
400.0 mV		0.1 mV	
4.000 V		1 mV	
40.00 V	$\pm 1.2\%rdg \pm 3dgt$	10 mV	
400.0 V		100 mV	
600 V		1 V	

* Overload Protection : 1200V rms 1minute. * Hz : Autorangeing only
* Crestfactor : less than 3. 600V range ; less than 1.5.

	Range	Accuracy	Resolution
Hz	1.000Hz~4.999Hz		1 mHz
	5.00Hz~49.99Hz		10mHz
	50.0Hz~499.9Hz	$\pm 0.2\%rdg$	100mHz
	0.500kHz~4.999kHz	$\pm 2dgt$	1 Hz
	5.00kHz~49.99kHz		10 Hz
	50.0kHz~100.0kHz		100 Hz

% 0.1%~99.9% $\pm 2\%rdg \pm 2dgt$ 0.1 %

* Range Selection : Auto/Manual-ranging. Hz : Autorangeing only.
* Accuracy of 400.0mV Range : 50/60Hz
* Crestfactor : less than 3. 600V Range ; less than 2.

	Range	Accuracy	Resolution
3. Ω (Resistance)	400.0 Ω	$\pm 1.5\%rdg \pm 5dgt$	0.1 Ω
	4.000 k Ω		1 Ω
	40.0 k Ω	$\pm 1.0\%rdg \pm 3dgt$	10 Ω
	400.0 k Ω		100 Ω
	4.000 M Ω	$\pm 3.0\%rdg \pm 4dgt$	1k Ω
	40.00 M Ω	$\pm 5.0\%rdg \pm 7dgt$	10k Ω

* Range Selection : Auto/Manual-ranging.
* Overload Protection : 300 V rms for 1minute.

	Range	Accuracy	Resolution
4. \cdot (Continuity Test)	Buzzer	$\pm 1.5\%rdg \pm 5dgt$	0.1 Ω
	400.0 Ω		

* Overload Protection : 300V rms for 1minute.

	Range	Accuracy	Resolution
5. \rightarrow (Diode Test)	0~1.5V	$\pm 5\%rdg \pm 5dgt$	1mV

	Range	Accuracy	Resolution
6. \rightarrow (Capacitance)	50.0 nF		10 pF
	500.0 nF		100 pF
	5.000 μ F	$\pm 5\%rdg \pm 10dgt$	1 nF
	50.00 μ F		10 nF
	100.0 μ F		100 nF

* Range selection : Auto/Manual-ranging.

* Specifications are subject to change without notice.

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