

sanwa®

TOKYO JAPAN

DIGITAL CLAMP METER DCL series

New clamp meter designed to be lightweight for portable use

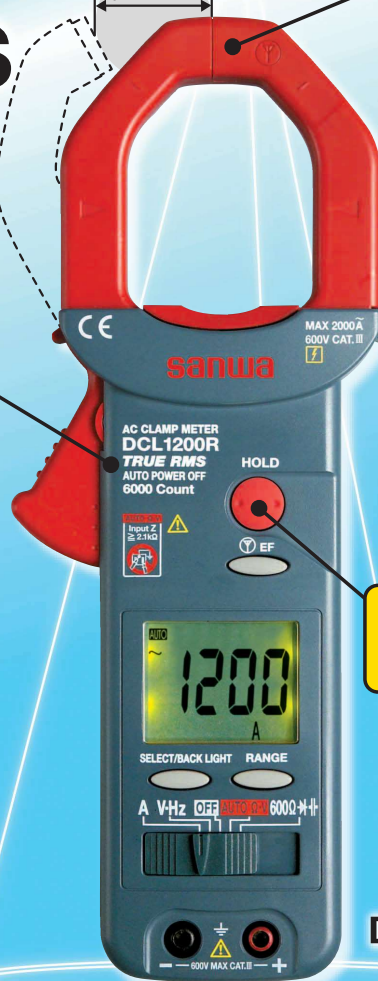
Light Weight **290g**

"Approx. 30% lighter than our equivalent models"

Non Contact Voltage
detection function
(EF function)

True RMS reading to measure
nonsinusoidal waveform
AC current and voltage
Can measure up to AC1200A
(MAX 2000A)

φ42mm



DCL1000

Large data hold button
to hold reading
easily and precisely

DCL1200R

www.sanwa-meter.co.jp

SANWA DIGITAL CLAMP METER

DCL series

Measuring Range and Best Accuracy : Temperature 23±5°C, Humidity 75% R.H. max

□ General Specifications

Model	DCL1000	DCL1200R
Operating Method	Δ-Σ Method	
AC Sensing	Average value	True RMS AC coupling
LCD	4000 counts	6000 counts
Sampling rate	3 times / sec nominal	5 times / sec nominal
Range selection	Auto and Manual	
Over-range indication	"OL" shown in numerical part	
Polarity indication	"-" indicated only when negative input	
Low Battery Indication	⚡ Mark lights or flickers at about 2.4V or below	
Environmental condition	Altitude 2,000m or below , pollution degree II	
Operation Temperature	5°C to 40°C and maximum relative humidity 80% for temperature up to 31°C decreasing linearly to 50% relative humidity at 40°C (No condensation)	
Storage Temperature / Humidity	-20°C to 60°C, 70%RH or below (with battery removed)	



DCL1000



DCL1200R

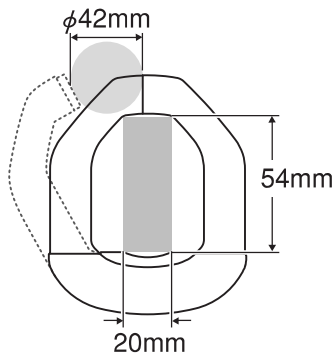


■ Model : DCL1000

FUNCTION	RANGE	ACCURACY	BANDWIDTH	INPUT IMPEDANCE
ACA (Average)	400.0A, 1000A	±(1.7%rdg + 5dgt)	Sine Wave AC 50Hz/60Hz	—
DCV	400.0mV	±(1.2%rdg + 3dgt)	—	Approx. 1000MΩ
	4.000V, 40.00V, 400.0V	±(1.9%rdg + 3dgt)		Approx. 10MΩ
	600V	±(2.2%rdg + 4dgt)		
	ACV (Average)	400.0mV		±(4.2%rdg + 5dgt)
4.000V		±(2.2%rdg + 5dgt)	50Hz/60Hz	
40.00V		±(2.7%rdg + 5dgt)	60Hz - 500Hz	
		±(2.2%rdg + 5dgt)	50Hz/60Hz	
400.0V		±(2.7%rdg + 5dgt)	60Hz - 500Hz	
		±(2.2%rdg + 5dgt)	50Hz/60Hz	
Resistance Ω	600V	±(3.2%rdg + 5dgt)	50Hz - 500Hz	Open Circuit Voltage : Approx. DC0.4V
	400.0Ω	±(1.7%rdg + 6dgt)	Open Circuit Voltage : Approx. DC0.4V	
	4.000kΩ, 40.00kΩ, 400.0kΩ	±(1.2%rdg + 4dgt)		
	4.000MΩ	±(1.7%rdg + 4dgt)		
	40.00MΩ	±(2.7%rdg + 4dgt)		
	Measuring Range : 400.0 Ω Buzzer Sound Range : 0 Ω to 65 Ω (±55 Ω) Open Circuit Voltage : Approx. 0.4VDC			
Continuity Check Buzzer 				
Diode Test 	Open Circuit Voltage : Approx. 1.6VDC Test Current : 0.4mA (Typical)			

■ Model : DCL1200R

FUNCTION	RANGE	ACCURACY	BANDWIDTH	INPUT IMPEDANCE	REMARKS
ACA (True RMS)	400.0A, 1200A	± (1.7%rdg + 5dgt)	50Hz/60Hz (Sine wave AC)		CREST FACTOR (CF) : Full Scale CF<2.0, Half Scale CF<4.0 Accuracy guaranteed 5% to 100% of the range.
DCV	6.000V	± (0.7%rdg + 3dgt)	—	Approx. 5M Ω	—
	60.00V	± (1.2%rdg + 5dgt)			
	600.0V	± (2.2%rdg + 5dgt)			
ACV (True RMS ac coupling)	6.000V	± (1.7%rdg + 5dgt)	50Hz/60Hz	Approx. 5M Ω	CREST FACTOR (CF) : Full Scale CF<1.6, Half Scale CF<3.3
		± (2.2%rdg + 5dgt)	50Hz ~ 500Hz		
	60.00V	± (1.7%rdg + 5dgt)	50Hz/60Hz		
		± (2.2%rdg + 5dgt)	50Hz ~ 500Hz		
		± (2.2%rdg + 5dgt)	50Hz/60Hz		
	600.0V	± (2.7%rdg + 5dgt)	50Hz ~ 500Hz		
Auto V · Ω	DC 6.000V	± (1.0%rdg + 3dgt)	—	A guide for input voltages and impedance : 100V : 15k Ω 300V : 100k Ω 600V : 210k Ω	The initial internal resistance is about 2.1k Ω and at an input above 50V, the internal resistance increases rapidly.
	DC 60.00V	± (1.2%rdg + 5dgt)			
	DC 600.0V	± (2.2%rdg + 5dgt)			
	AC 6.000V	± (1.7%rdg + 5dgt)	50Hz/60Hz		
		± (2.2%rdg + 5dgt)	50Hz ~ 500Hz		
	AC 60.00V	± (2.2%rdg + 5dgt)	50Hz ~ 500Hz		
		± (1.7%rdg + 5dgt)	50Hz/60Hz		
	AC 600.0V	± (2.2%rdg + 5dgt)	50Hz ~ 500Hz		
		± (2.7%rdg + 5dgt)	50Hz ~ 500Hz		
		6.000k Ω	± (1.4%rdg + 6dgt)		
	60.00k Ω, 600.0k Ω	± (1.2%rdg + 4dgt)			
	6.000M Ω	± (2.2%rdg + 4dgt)			
Resistance /Continuity Check (600 Ω)	600.0 Ω	± (2.2%rdg + 8dgt)	• Buzzer response speed : < 100 μs • Buzzer Sound Range : 0 Ω - 155Ω (±145 Ω) • Open circuit voltage : Approx. 0.4 VDC		
Frequency	9.999Hz	± (0.6%rdg + 4dgt)	SENSITIVITY (Sine Wave)		• 6.000V - 600V Range Auto Range Only • Only 6.000V Range is Specified
	99.99Hz		4V / 6.000V Range		
	999.9Hz		30V / 60.00V Range		
	9.999kHz		60V / 600.0V Range		
	30.00kHz		4V / 6.000V Range		
Capacitance	100.0nF	± (3.7%rdg + 5dgt)	• Auto Range Only • 50.00nF or below out of accuracy guarantee range • The accuracy drops to ± (12% rdg + 8 dgt) when the power supply voltage is in a range of 2.8V and about 2.4V (out of accuracy guarantee range) at which the battery low mark will light		
	1000nF				
	10.00 μF				
	100.0 μF				
	2000 μF				
EF function (Non contact voltage detection)	VOLTAGE DETECTED		GUIDE FOR BAR INDICATION		REMARKS • Frequency: 50Hz/60Hz • Detection sensor : mark part of clamp sensor (CT) • Voltage detection can be performed with test lead connected to + measuring terminal
	15V - 85V		—		
	40V - 130V		—		
	60V - 210V		—		
	90V - 300V		—		
	120V or above		—		
Diode Test	Open Circuit Voltage : Approx. 1.6VDC			Test Current : 0.4mA (Typical)	



sanwa

SANWA ELECTRIC INSTRUMENT CO.,LTD. Tokyo Japan

Dempa Bldg, 4-4 Sotokanda 2-Chome Chiyoda-ku, Tokyo 101-0021, Japan
Tel: 81-3-3251-0941 Fax: 81-3-3256-9740

Web site: www.sanwa-meter.co.jp

Specifications and external appearance of the product described above may be revised for modification without prior notice.

Distributed by