sanwa

Digital Multimeter CE

CD130, CD110, CD100

SPECIFICATIONS

/	**CD130**	**CD110 / CD100**
Measurement method	Dual integration	Dual integration
Maximum Display	4000 Bar graph 40 segments in max 9999 for frequency measurement	3200 Bar graph 32 segments in max.
Polarity display	Automatic selection	
Overload indication	Flickering of the highest digit (except for 10A)	"OL" mark indication
Sampling Rate	Approx. 2times/sec(number display) Approx. 20times/sec(Bar graph display) Approx. 1time/sec(Capacity mesurement) Approx. 2-4times/sec(Frequency mesurement)	Approx. 2times/sec(number display) Approx. 12times/sec(Bar graph display)
Operating temperature range	0__40'c 80% RH max. No condensation	0__40'c80% RH max. No condensation
Storage temperature	-10__50'c 70% RH max. No condensation	-10__50'c 70% RH max. No condensation

range		
Power requirements	R06(IEC) dry battery,2pcs.	R06(IEC) dry battery,2pcs.
Power consumption	Approx. 18mW TPY	Approx. 18mW TPY(CD110) Approx. 8mW TRY(CD100)
Dimensions & weight	179(H)X87(W)X51(D)mm,approx. 410g	179(H)X87(W)X51(D)mm,approx. 400g

Function

Model	**CD130**	**CD110**	**CD100**
True RMS	●	●	-
Bar Graph	●	●	●
Range Hold	●	●	●
Audible Continuity	●	●	●
Diode Test	●	●	●
Protective Holster	●	●	●
Auto Range	●	●	●
Data Hold	●	●	●
Relative Readings	●	-	-
Memory & Read Memory	●	-	-
Min Max Hold	●	-	-
Alarm for Ampere range	●	●	●
Pulse Check	-	●	●
1.5V Battery Check	-	●	●

Measurement Range and Accuracy

Accuracy assurance range:18__28'c 80%RH MAX. No condensation

-	**CD130**		
Function	**Range**	**Accuracy**	**Input Resistance**
DCV	400.0mV	±(0.3%rdg+2dgt)	Approx.100MΩ
	4.000V	±(0.5%rdg+2dgt)	Approx.11MΩ
	40.00V		Approx.10MΩ
	400.0V		
	1000V		

ACV	400.0mV	±(0.8%rdg+5dgt)	Approx.100M Ω
	4.000V	±(0.5%rdg+5dgt)	Approx.11M Ω
	40.00V	±(0.8%rdg+5dgt)	Approx.10M Ω
	400.0V		
	750V		
DCA	400.0μA	±(0.5%rdg+2dgt)	Approx.1k Ω
	40.00mA		Approx.10 Ω
	400.0mA		Approx.1 Ω
	10.00A	±(1%rdg+2dgt)	Approx.0.01 Ω
ACA	400.0μA	±(1%rdg+5dgt)	Approx.1k Ω
	40.00mA		Approx.10 Ω
	400.0mA		Approx.1 Ω
	10.00A	±(1.5%rdg+5dgt)	Approx.0.01 Ω
OHM	400.0 Ω	±(0.8%rdg+2dgt)	Open Voltage : Approx. 0.4V
	4.000k Ω		
	40.00k Ω		
	400.0k Ω		
	4.000M Ω	±(1%rdg+2dgt)	
	40.00M Ω	±(2%rdg+2dgt)	
Capacitance	4.000nF	±(0.7%rdg+5dgt)	-
	40.00nF		
	400.0nF		
	4.000μF		
	40.00μ F		
Hz	99.99Hz	±(0.3%rdg+3dgt)	Measuring range: 10Hz__999kHz
	999.9Hz		
	9.999kHz		
	99.9kHz		
	999kHz		
Hz LPF	99.99Hz	±(0.5%rdg+3dgt)	Measuring range: 10Hz__999.9Hz
	999.9Hz		

-		CD110		CD100	
Function	**Range**	**Accuracy**	**Input Resistance**	**Accuracy**	**Input Resistance**
DCV	320.0mV	±(0.3%rdg+2dgt)	>=100M Ω	±(0.3%rdg+2dgt)	>=100M Ω
	3.200V	±(0.5%rdg+2dgt)	Approx.11M Ω	±(0.5%rdg+2dgt)	Approx.11M Ω
	32.00V		Approx.10M Ω		Approx.10M Ω

	320.0V				
	1000V				
ACV	3.200V	±(0.5%rdg+6dgt)	Approx.11M Ω	±(0.8%rdg+3dgt)	Approx.11M Ω
	32.00V	±(0.8%rdg+6dgt)	Approx.10M Ω		Approx.10M Ω
	320.0V	±(0.8%rdg+3dgt)			
	750V				
DCA	32.00μA	±(0.5%rdg+2dgt)	Approx.5k Ω	±(0.5%rdg+2dgt)	Approx.5k Ω
	320.0μA		Approx.500 Ω		Approx.500 Ω
	3200μA				
	32.00mA		Approx.5 Ω		Approx.5k Ω
	320.0mA	±(0.8%rdg+2dgt)		±(0.8%rdg+2dgt)	
	10.00A (CD110)	±(1.0%rdg+2dgt)	Approx.0.005 Ω	-	-
	20.00A (CD100)	-	-	±(1.0%rdg+2dgt)	Approx.0.005 Ω
ACA	32.00μA	±(1.0%rdg+5dgt)	Approx.5k Ω	±(1.0%rdg+4dgt)	Approx.5k Ω
	320.0μA		Approx.500 Ω		Approx.500 Ω
	3200μA				
	32.00mA		Approx.5 Ω		Approx.5 Ω
	320.0mA	±(1.2%rdg+5dgt)		±(1.2%rdg+4dgt)	
	10.00A (CD110)	±(1.5%rdg+5dgt)	Approx.0.005 Ω	-	-
	20.00A (CD100)	-	-	±(1.5%rdg+4dgt)	Approx.0.005 Ω
OHM	320.0 Ω	±(0.8%rdg+3dgt)	Open Voltage : Approx. 1.3V	±(0.8%rdg+3dgt)	Open Voltage : Approx. 1.3V
	3.200k Ω	±(0.8%rdg+2dgt)		±(0.8%rdg+2dgt)	
	32.00k Ω				
	320.0k Ω				
	3.200M Ω	±(1.0%rdg+2dgt)		±(1.0%rdg+2dgt)	
	30.00M Ω	±(2.0%rdg+2dgt)		±(2.0%rdg+2dgt)	