

**NEW!**



■ Input specifications

● DV voltage measurement

Range	Measurement Range	Display	Accuracy	input impedance	Maximum allowable input
11	±199.99mV	Offset	±(0.1% of rdg+2 digit)	100MΩ	±50V
12	±1.9999V	±19999			
13	±19.99V	Fullscale			
14	±199.99V	±19999	Approx.1MΩ	±250V	

● DC voltage measurement 15 range

Range	Measurement Range	Display	Accuracy	input impedance	Maximum allowable input
15	±700.0V	Offset	±(0.1% of rdg+3 digit)	100MΩ	±700V
		±19999			
		Fullscale			
		±19999			

● DC current measurement

Range	Measurement Range	Display	Accuracy	input impedance	Maximum allowable input
22	±1.9999mA	Offset	±(0.2% of rdg+3 digit)	Approx.10Ω	±50mA
23	±19.999mA	±19999			
24	±199.99mA	Fullscale			
25	±1999.9mA	±19999	Approx0.1Ω	±3A	

● Process signal measurement

Range	Measurement Range	Display	Accuracy	input impedance	Maximum allowable input
2A	4~20mA	Offset	±(0.2% of rdg+3digit)	Approx.10Ω	±50mA
1V	1~5V	Fullscale	±(0.1% of rdg+3digit)	Approx.1MΩ	±50V
		±19999	±(0.1% of rdg+3digit)	Approx1MΩ	±50V

● Common specification

Operating Type : ΔΣ conversion type  
 Input Circuit : Single Ended Type  
 Sampling speed : Maximum 25 times per second  
 Over range alarm : Display O.L.or -O.L. applying to maximum display for the input  
 Display : red 7 segment LED (character height 14.2mm)  
 Display range : -19999~19999  
 Maximum display : 19999  
 Zero display : Leading zero suppress  
 Built-in EEPROM  
 Number of rewriting : 1,000,000 times(min)  
 Operating temperature and humidity range : 0~50°C35~85%RH  
 Storage temperature and humidity range : -10~70°C not less than 60% RH  
 Dimensions : 96mm(H) × 48mm(W) × 75mm(D)  
 Weight : 160g(TYP)(AC power supply)/150g(TYP)(DC power supply)  
 Dielectric voltage : power supply signal input/BCD output / Between of external control input AC 1500V per minute(AC power supply) power supply signal input/ BCD output/ Between of external control input DC500V per minute(DC power supply) Signal input BCD output/between of external control DC500V per minute(common) Case between of each terminal AC 1500V per minute (common) : In the above interterminal DC 500V 100MΩ  
 Insulated resistance : Built-in rewriting EEPROM, in the case of digital zero "OFF" to "ON", setup "ON", digital zero "OFF" to "ON".  
 Attention : Please be sure that number of rewriting not surpassing the above number of cases

■ Features

- \* DIN size (48X96mm)
- \* BCD output (option)

● AC current (A9111-0□,A9112-0□)

Power supply voltage range : AC100~240V±10%  
 Consuming VA : 4.5VA

● DC power supply (A9311-0□,A9312-0□)

Power supply voltage range : DC5~5%~12V±10%  
 Electric power consumption : 1.5W

● DC power supply(A9411-0□,A9412-0□)

Power supply voltage range : DC12~24V±10%  
 Electric power consumption : 1.5W

■ External control

Hold "Hold terminal or COM terminal" short, or hold "ON" with the "0" level  
 Digital zero "DZ terminal or COM terminal" short or digital zero "ON" with the "0" level  
 Peak hold "PH terminal or COM terminal" short or peak hold function  
 "ON" with the "0" level  
 Pattern select By the combination of P.SEL0 terminal, P.SEL1 terminal open/short(or "1" level/"0" level),select the scaling pattern  
 Attention) "0" level : 0~1.5V apply to COM, "1" level : 3.5~5V apply to COM

■ Option specification

● BCD output

◎At TTL (A9□11-02,A9□1-02)

Measurement data Tri-state parallel BCD  
 Polarity signal "1" level at minus display  
 "OVER" signal "1" level at OVER display  
 Printing command signal A positive pulse of approx.1ms at every measurement  
 Output logic Available for switching (except the printing command signal)  
 Output signal TTL level, funout 2 CMOS 5V

◎At open collector

Measurement data Negative logic transistor "ON" at logic 1  
 Polarity signal Transistor "ON" at minus input  
 "OVER" signal Transistor "ON" at overflow input  
 Printing command signal Transistor "ON" during a period of approx.20ms At every measurement completion  
 Transistor output capacity, Applied voltage 30V max  
 Current 10mA max  
 Saturated output voltage, less than 1.2V at 10mA

● ENABLE

Function Shorted Enable and COM terminals, Transistor OFF.  
 (High impedance status at TTL)  
 "0" level : applying to COM 0~1.5V  
 "1" level : applying to COM 3~5V