

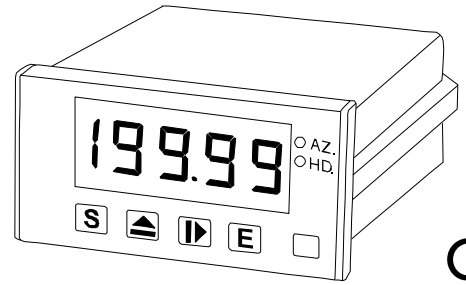


# MICROPROCESS DIGITAL METER

MODEL  
S2-412P

## FEATURES

- 4 1/2 digits display: ± 19999
- Accuracy: ±0.05% to ±0.25%
- Auto-zero and hold function
- Measuring adjustment in input sensing deviation
- Outside dimension is DIN standard (96x48mm)



## SPECIFICATION

### • Input

Variable to be Measured	Input Range	Input Impedance	Display Range
DC	0 ~ 5V	≥ 300KΩ	0 ~ ±19999 Programmable
	1 ~ 5V	≥ 300KΩ	
	0 ~ 10V	≥ 240KΩ	
	0 ~ 1mA	100Ω	
	4 ~ 20mA	10Ω	
	0 ~ 20mA	10Ω	
AC	0 ~ 1A	0.1Ω	0 ~ ±19999 Programmable
	0 ~ 5A	0.1Ω	
TRMS	0 ~ 110V	≥ 1MΩ	
	0 ~ 220V	≥ 1MΩ	
	0 ~ 750V	≥ 3MΩ	
	0 ~ 750V	≥ 3MΩ	

### • Analog Output

Output Range	Load Resistance	Output Resistance	Output Ripple
1 ~ 5V	≥ 1KΩ	≤ 0.05Ω	≤ 0.5% RO. (Peak)
0 ~ 10V			
0 ~ 1mA	0 ~ 10KΩ	≥ 20MΩ	
0 ~ 20mA	0 ~ 500Ω	≥ 5MΩ	
4 ~ 20mA			

### • Communication

Interface ..... RS 485  
 Protocol ..... MODBUS, RTU  
 Baud rate ..... 1200 ~ 38400  
 Address range ..... 1 ~ 255  
 Data format ..... N81, N82, O81, E81

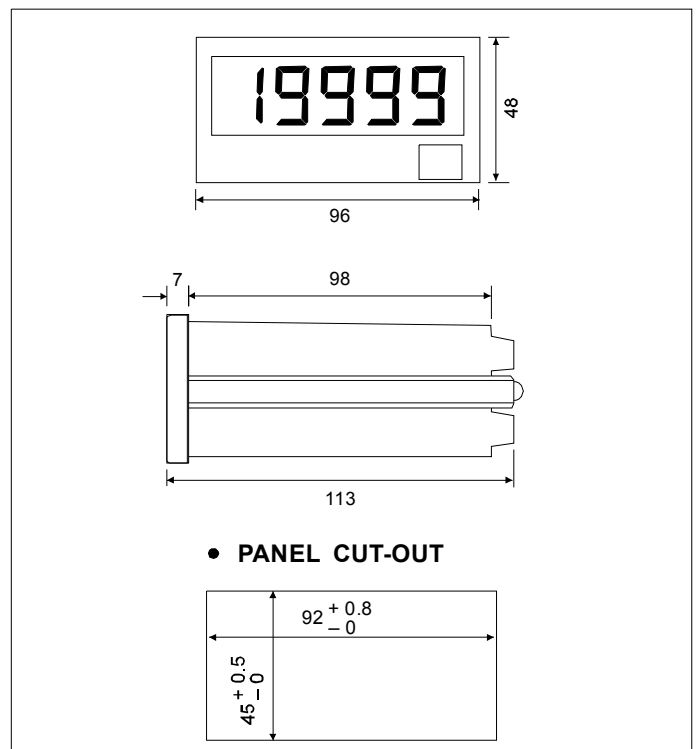
### • General

Display ..... 14.2mm(0.56")H, red LED  
 Accuracy ..... DC range ±0.05% F.S. ±2 digits  
                     AC range ±0.15% F.S. ±2 digits  
                     Output ±0.1% ~ ±0.25% RO  
 (Option: Depending on actual measuring)  
 Sampling time ..... Abt. 0.8 sec. Typically  
 Frequency range ..... 45 ~ 70HZ for AC range  
 Over indication ..... Flash "OFL" or "-OFL"  
 Over input signal ..... Flash display  
 Aux. power source ..... AC/DC 85 ~ 265V, DC 20 ~ 60V  
 Power consumption ..... ≤AC 8.5VA ≤DC 5W  
 Sensor power suppl ..... DC 24V, 30mA  
 Operating temperature range ..... 0 ~ 60°C  
 Storage temperature range ..... -10 ~ 70°C  
 Temperature coefficient ..... ≤ 100PPM/°C  
   ≤ 60PPM, 25°C±10°C  
 Max. relative humidity ..... 95%  
 Dielectric strength (IEC 688) ..... AC 2KV/1 minute  
   Input/output/power terminals  
   AC 3KV/1 minute  
   All terminals to case

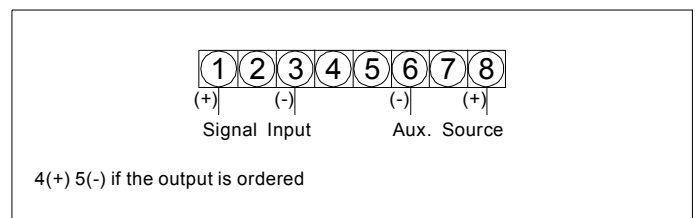
### • Electromagnetic compatibility

Electrostatic discharge ..... IEC 61000-4-2  
 Electromagnetic fields immunity ..... IEC 61000-4-3  
 Electrical transient in burst ..... IEC 61000-4-4  
 Withstanding impulse voltage ..... IEC 61000-4-5  
 Immunity to voltage dips ..... IEC 61000-4-11

## OUTSIDE DIMENSION (UNIT:mm)



## CONNECTION DIAGRAM



## ORDERING INFORMATION

S2-412P-

Input	Measuring Range	Output	Aux. Source	Option
D: DC	P1: 0 ~ 50mV A7: 0 ~ 1A	V2: 1~5V	1: AC/DC 85 ~ 265V	H: Data hold
A: AC	P2: 0 ~ 60mV A8: 0 ~ 5A	V4: 0~10V	2: DC 20V ~ 60V	D: Exciting DC 24V
T: TRMS	P3: 0 ~ 5V V6: 0 ~ 100V	A2: 0~1mA	0: Option	N: None
R: Pt100	P4: 1 ~ 1V V7: 0 ~ 220V	A3: 0~20mA		
K: K TYPE	P5: 0 ~ 10V T1: 0 ~ 400°C	A4: 4~20mA		
O: Option	P6: 0 ~ 1mA T2: 0 ~ 1200°C	RS: RS 485		
	P7: 4 ~ 20mA 00: Option	NO: None		
	P8: 0 ~ 20mA	00: Option		