Multi-purpose Digital Panel Meter, 4 Digits

Model: UMA4

Product Description

- LED display with high brightness and clarity, capable of displaying up to 4 digits
- Offers three output options: one- to two-stage alarms, analog signals, or RS485 transmission
- Equipped with pressure discharge control, suitable for environmental monitoring

Product Specification

Accuracy
±0.1% F.S. ±1 digit (DC)
±0.2% F.S. ±1 digit (AC)

Display screen
High brightness red LED
20.5 mm (0.8")

Sampling time
60 cycles/sec

Polarity indication
Automatic with " - " indication

Display range
-1999 ... 9999

Display over range indication
doFL/-doFL

Input over range indication
ioFL/-ioFL

Parameters indication
Push buttons

Back up memory
EEPROM

Relay contact
AC 250V/5A
DC 30V/7A

Analog output resolution
16 bit

Output communication
Current output: ≦ 10V
Voltage output: ≦ 20mA

Product Specification

Communication
RS485 Modbus RTU mode

Baud rate
19200/9600/4800/2400 bps

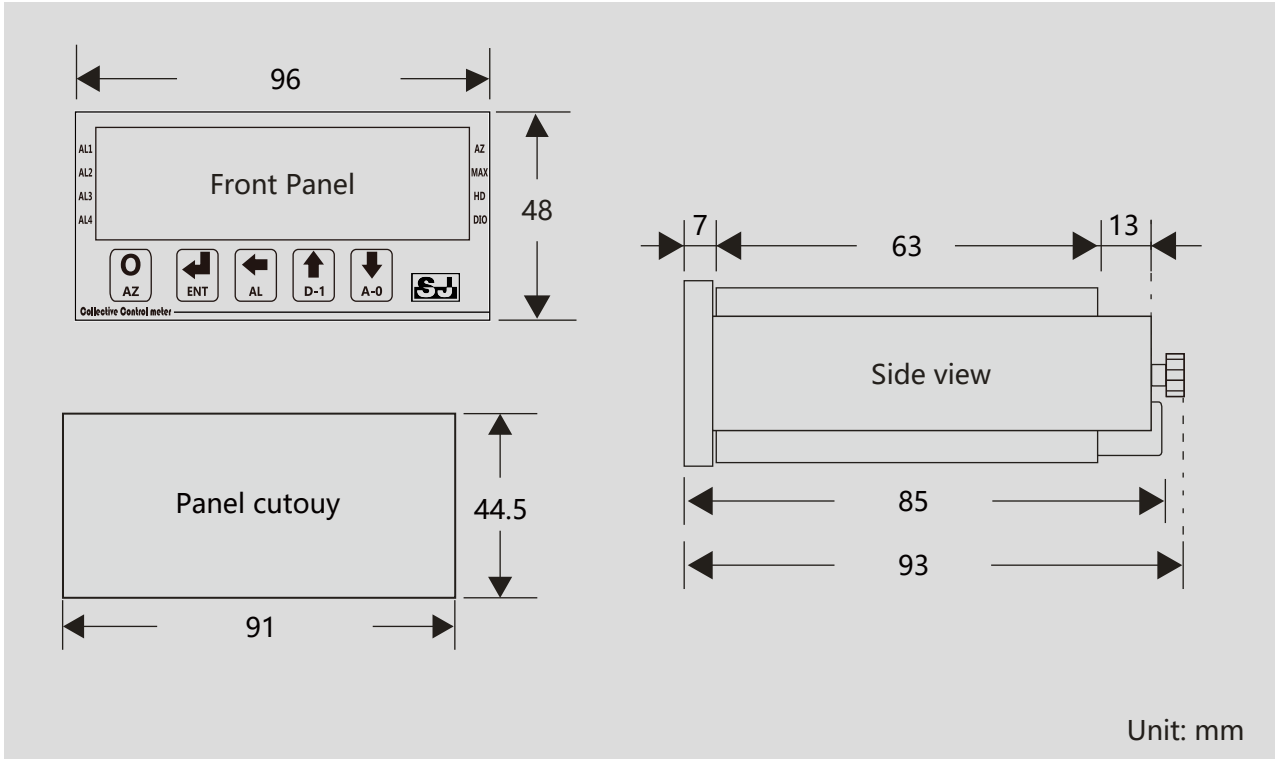
Tempering temperature
100 ppm/℃ (0℃ ... 60℃)

Ambient temperature& humidity
00℃ ... 60℃/20% ... 90% RH
(non-condensing)

Power supply
AC/DC 100V ... 240V
AC/DC 22V ... 50V

Power consumption
< 6.5VA

Dimensions



Order information

UMA4	Multi-purpose Digital Panel Meter, 4 Digits ordering information chapter	
Ordering information	Code	Product Specification
1		Input Type
	2	2, 3Wire sensor
	4	4Wire sensor
	D	DC
	A	AC AVG
	I	2Wire resistor
	L	Load call
	M	AC TRMS
	P	3Wire potentiometer
		Compound Input
	S01	0~10Vdc/0~5Vdc 、 4~20mAdc/0~20mAdc
	S02	0~500Vac/0~50Vac 、 0~5Aac/0~1Aac
	S03	0~500Vdc/0~50Vdc 、0~100mVdc/0~50mVdc
	S04	PT100/Thermocouple
2		Voltage（V）
	V1	0~50mV
	V2	0~5V
	V3	1~5V
	V4	0~10V
	V5	0~30V
	V6	0~300V
	V7	0~500V
	VO	Options
		Current（A）
	A1	0~20uA
	A2	0~200uA
	A3	0~2mA
	A4	0~20mA
	A5	0~200mA
	A6	4~20mA
	A7	0~2A
	A8	0~5A
	A9	0~10A
	AO	Options
		Potentiometer
	P1	500Ω~10KΩ
	P2	10KΩ~100KΩ
	P3	100KΩ~1MΩ
	PO	Options
		Resistor
	I1	0~10Ω
	I2	0~100Ω
	I3	0~1KΩ

UMA4	Multi-purpose Digital Panel Meter, 4 Digits ordering information chapter	
Ordering information	Code	Product Specification
		Resistor
	I4	0~10KΩ
	I5	0~100KΩ
	IO	Options
		Thermometer
	PT	PT100
	K	K TYPE
		Load cell
	L1	1mV/V EXC 5V
	L2	2mV/V EXC 5V
	L3	3mV/V EXC 5V
	L4	4mV/V EXC 5V
	L5	5mV/V EXC 5V
	LO	Options
3		Aux. Power
	A	AC/DC 100~240V
	C	DC 22~50V
	D	Options
4		Output
	N	None
	R1	1Relay
	R2	2Relays
	V	0~10 Vdc
	A	4~20 mAdc
	Y	RS-485
	O	Options

Order code:

		1	2	3	4
UMA4	–				

For any changes to the specifications of this catalogue, the latest version shall prevail.

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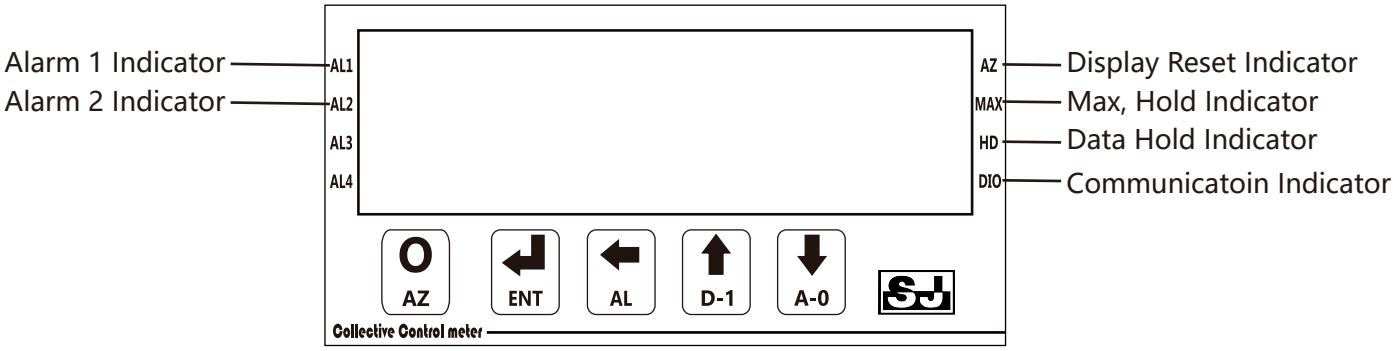
Multi-purpose Digital Panel Meter, 4 Digits
Model:UMA4

Digital Panel Meter Operation Manual

Key Functions



Key Functions

AZ	Function key	Enable the setting function for measuring status
ENT	Enter key & save key	Enter to parameter groups for measuring status; Save the value for parameter setting
←	Shift key & Alarm setting key	Hold for 3 sec. enter to alarm setpoint modification for measuring status; Enter to parameter page; Move the cursor left for parameter setting
↑	Up key & display setting key	Hold for 3 sec. enter to display group setting for measuring status; Back to the last parameter page; Increase the digit for parameter setting
↓	Down key & A/O setting key	Hold for 3 sec. enter to A/O group setting for measuring status; Go to the next parameter page; Decrease the digit for parameter setting
↑ ↓	In any status can back to measuring status	

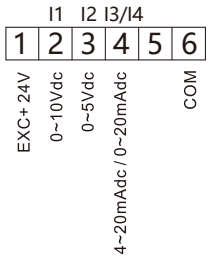
Error Code of Self-diagnosis

Display	Descriptions
ioFL	Input signal is over 120% of input range.
-ioFL	Input signal is lower than the input range -10%
AdEr	The input signal is 180% above the rating; or the internal line is damaged
doFL	Input signal is over display range(9999)
-doFL	Input signal is lower than the maximum display range(-1999)
E-oo	EEPROM reading/writing suffers the interference (about 1 million times).

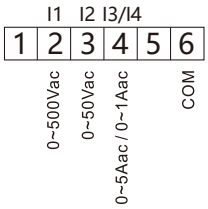
Wiring Connection

Compound Input (S01, S02, S03, S04)

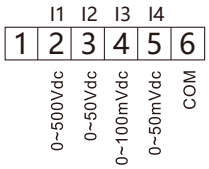
S01 Input



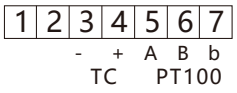
S02 Input



S03 Input

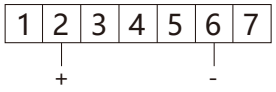


S04 Input

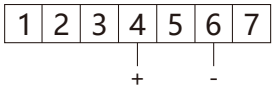


Input Function

Voltage(V)(AC,DC)

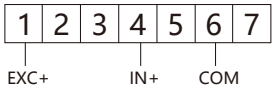


Current(A)(AC,DC)

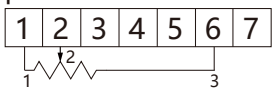


2Wire resistor

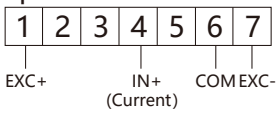
2, 3Wire sensor (Transmitter)



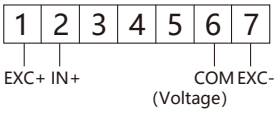
3Wire potentionmeter



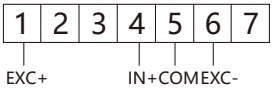
4Wire potentionmeter



4Wire sensor (Transmitter)

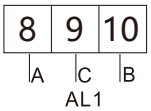


Load cell

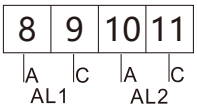


Output Function

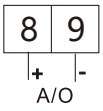
Relay*1 Output



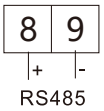
Relay*2 Output



Analog Output

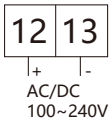


RS485 Output

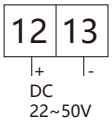


Power

AC Power



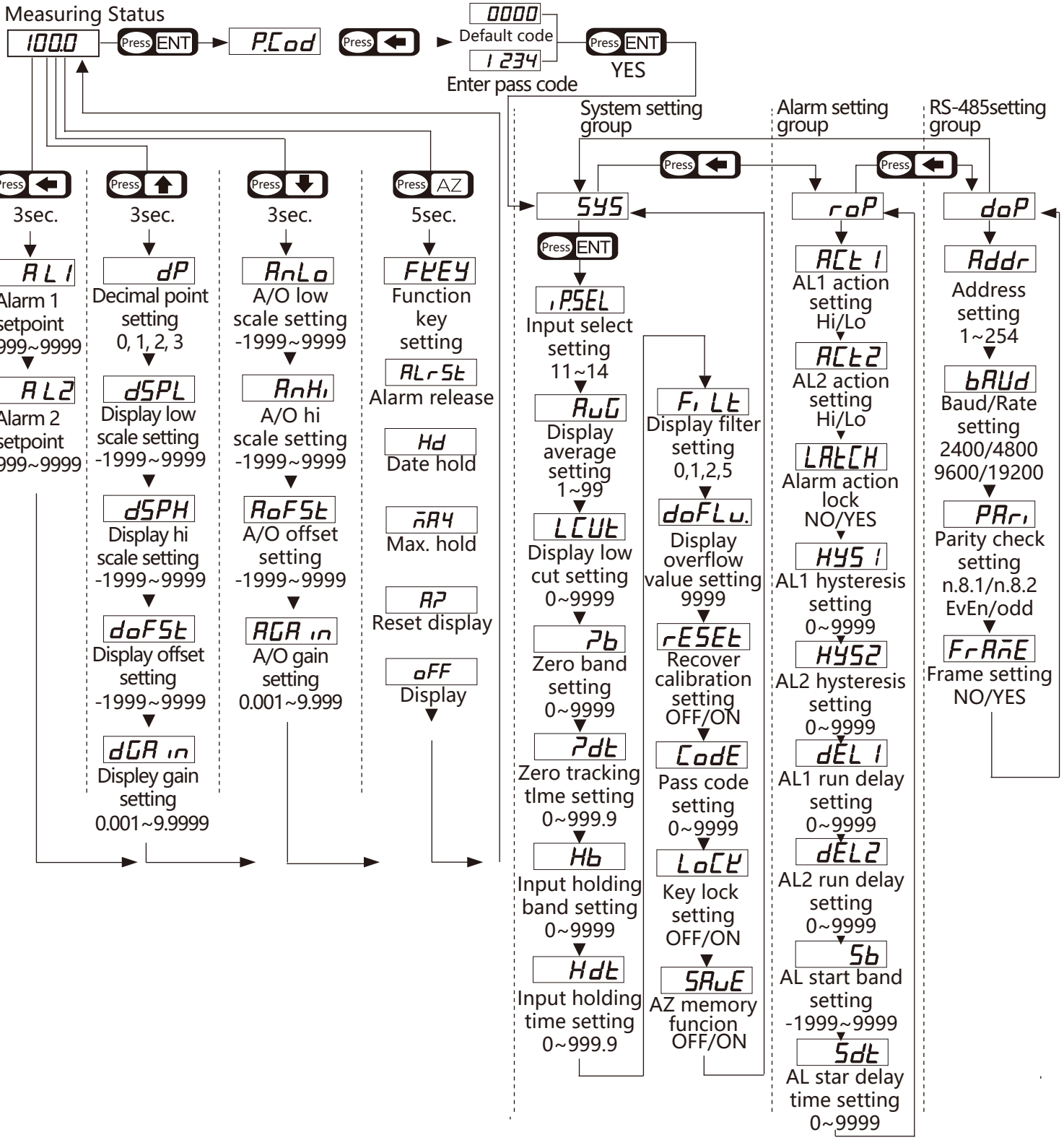
DC Power



Operation Process and Display

Push-button name indication

ENT	Shift	Up	Down	Home
Enter/Save				



Modbus RTU Mode Protocol Address Map

※Date Form: 16/32 Bit，+/- 8000~7FFF (-32768~32767)， 80000000~7FFFFFFF (-2147483648-2147483647)

Modbus	Hex	Name	Act	Discriptions
40001	0000	DISPLAY	R	Current display range: 0000~7FFFF(0~32767)
40002	0001			
40003	0002			
40004	0003	DP	R/W	Decimal point setting; range: 0000~000(0~3)0:10^0, 1:10^{-1}, 2:10^{-2}, 3:10^{-3}
40005	0004	BAUB	R/W	Baud rate setting; range: 0000~0003(0~3)0：2400，1：4800，2：9600，3：19200
40006	0005	PARI	R/W	Parity setting; range: 0000~0003(0~3)0:N.8.1, 1:N.8.2, 2:EVEN, 3:ODD
40007	0006	AVG	R/W	Display setting; range: 0001~0063(1~99)
40008	0007	DISPLAY	R	Current display; range: 0000~7FFFF(0~32767)
40009	0008	ADDR	R/W	Address setting; range: 0000~00FF(1~254)
40010	0009			
40011	000A			
40012	000B			
40013	000C			
40014	000D			
40015	000E			
40016	000F			
40017	0010			
40018	0011			
40019	0012	CODE	R/W	Pass code setting; range: 0000~270F(0~9999) Hi bit
40020	0013		R/W	Pass code setting; range: 0000~270F(0~9999) Low bit
40021	0014	DSPL	R/W	Display low scale setting; range: D8F1~270F(-1999~9999) Hi bit
40022	0015		R/W	Display low scale setting; range: D8F1~270F(-1999~9999) Low bit
40023	0016	DSPH	R/W	Display hi scale setting; range: D8F1~270F(-1999~9999) Hi bit
40024	0017		R/W	Display hi scale setting; range: D8F1~270F(-1999~9999) Low bit
40025	0018			
40026	0019	DISPLAY	R	Current display; range: D8F1~270F(-1999~9999) Hi bit
40027	001A		R	Current display; range: D8F1~270F(-1999~9999) Low bit
40028	001B			
40029	001C			
40030	001D			
40031	001E	DISPLAY	R	Current display; range: D8F1~270F(-1999~9999) Hi bit
40032	001F		R	Current display; range: D8F1~270F(-1999~9999) Low bit
40039	0026	DISPLAY	R	Current display; range: D8F1~270F(-1999~9999) Hi bit
40040	0027		R	Current display; range: D8F1~270F(-1999~9999) Low bit