5 DIGITAL MICRO-PROCESS METER (24x48mm) with 1 ALARM

AM5S-A

■ FEATURES

- Accuracy: ±0.1% F.S. ±1 digit (DC / Potentiometer / Resistor / PT-100 / Load Cell)
  ±0.2% F.S. ±1 digit (AC)
- Measuring AC, DC Voltage / AC, DC Current / Potentiometer / Resistor / PT-100 / Load Cell)
- High brightness 0.4" LED display range: -19999~99999; decimal point selectable
- Reset (External terminal) and 1 alarm setting (Hi or Lo) programmable
- High stability, non-flammable case (PC), high safety
- CE approval

■ ORDER INFORMATION : AM5S - A - Code 1 Code 2 - Code 3 - Code 4

Code 1	Input Type
D	DC
A	AC AVG
M	AC TRMS
P	3 Wire Potentiometer
I	2 Wire Resistor
T	RTD (PT-100)
L	Load Cell
2	2, 3 Wire Sensor
4	4 Wire Sensor

Code 2	Voltage	Code 2	Current	Code 2	Potentiometer	Code 2	Resistor	Code 2	RTD (PT-100)	Code 2	Load Cell
V1	0~50mV	A1	0~20uA	P1	500Ω~10KΩ	I1	0~10Ω	T1	-50~50℃	L1	1mV/V EX.5V
V2	0~5V	A2	0~200uA	P2	10KΩ~100KΩ	I2	0~100Ω	T2	-100~100℃	L2	2mV/V EX.5V
V3	1~5V	A3	0~2mA	P3	100KΩ~1MΩ	I3	0~1KΩ	T3	-200~200℃	L3	3mV/V EX.5V
V4	0~10V	A4	0~20mA	PO	Option	I4	0~10KΩ	T4	0~600℃	L4	1mV/V EX.10V
V5	0~36V	A5	0~200mA			I5	0~100KΩ	TO	Option	L5	2mV/V EX.10V
V6	0~300V	A6	4~20mA			IO	Option			L6	3mV/V EX.10V
V7	0~600V	A7	0~2A							LO	Option
VO	Option	AO	Option								

Code 3	Aux. Power
A	AC/DC100~240V
D	AC/DC 22V~60V

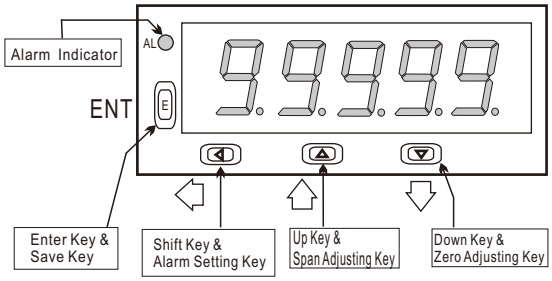
Code 4	Alarm Output
N	None
R1	1 Relay

**1: 2 wire type offers excitation power DC24V for 2 wire (Loop Power) pressure, temperature, humidity sensors using.
2: 3.4 wire type offers excitation power DC24V for 3, 4 wire (Loop Power) pressure, temperature, humidity sensors using.
3: Load Cell type of excitation power DC5V can have 2 load cell in parallel; DC10V only can offer 1 load cell to use.

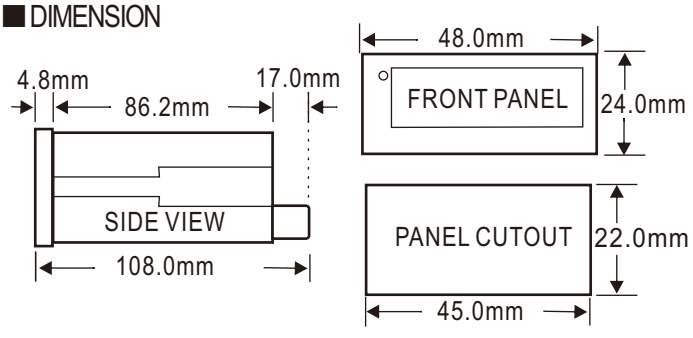
■ SPECIFICATION

- ♦ Accuracy: ±0.1% F.S. ±1 digit (DC / Potentiometer / Resistor / PT-100 / Load Cell)
  ±0.2% F.S. ±1 digit (AC)
- ♦ Display Screen: High brightness red LED; 10.16mm(0.4")
- ♦ Sampling Time: 16 cycles / sec
- ♦ Display Rang: -19999~99999
- ♦ Zero Adjustment: -19999~99999
- ♦ Over Range Indication: doFL / ioFL or -doFL / -ioFL
- ♦ Polarity Indication: Automatic with "-" indication
- ♦ Parameters Setting: Push buttons
- ♦ Back Up Memory: EEPROM
- ♦ Alarm Action: "≧(Hi) on" or "< (Lo) on"
- ♦ Alarm Run Delay Time: 0~99 sec
- ♦ Relay Contact: AC 277V / 7A; DC 30V / 7A
- ♦ Temperature Coefficient: 100ppm / ℃ (0~60℃)
- ♦ Operating Temperature: 0~60℃
- ♦ Operating Humidity: 20~90% RH (non-condensing)
- ♦ Storage Temperature: -10~70℃
- ♦ Storage Humidity: 20~90% RH (non-condensing)
- ♦ Power Supply: AC/DC 100~240V; AC/DC 22~60V
- ♦ Power Consumption: 4.5VA
- ♦ Surge Test: 2KVac / 1min (Input / Power)
- ♦ Input Impendence: Voltage: >2V for 20KΩ / V; ≦2V for >200MΩ
  Current: ≧0.2A at 100mV; <0.2A at 1V

■ FRONT PANEL & KEY FUNCTIONS

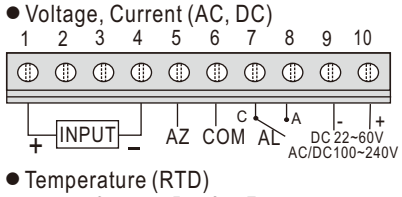


■ DIMENSION

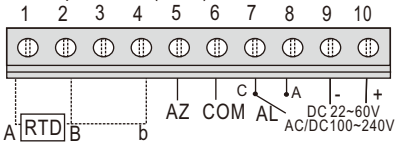


■ WIRING CONNECTION

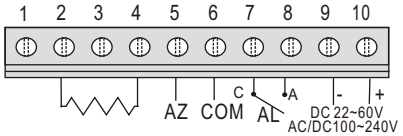
● Voltage, Current (AC, DC)



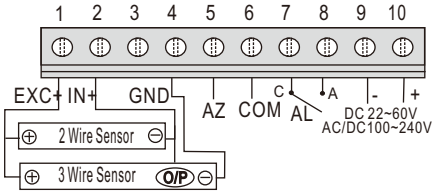
● Temperature (RTD)



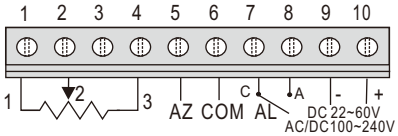
● 2 Wire Resistor



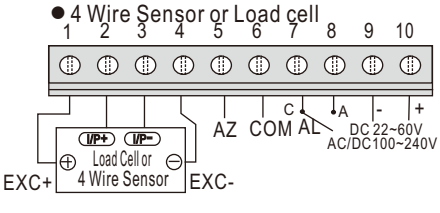
● 2,3 Wire Sensor



● 3 Wire Petentiometer



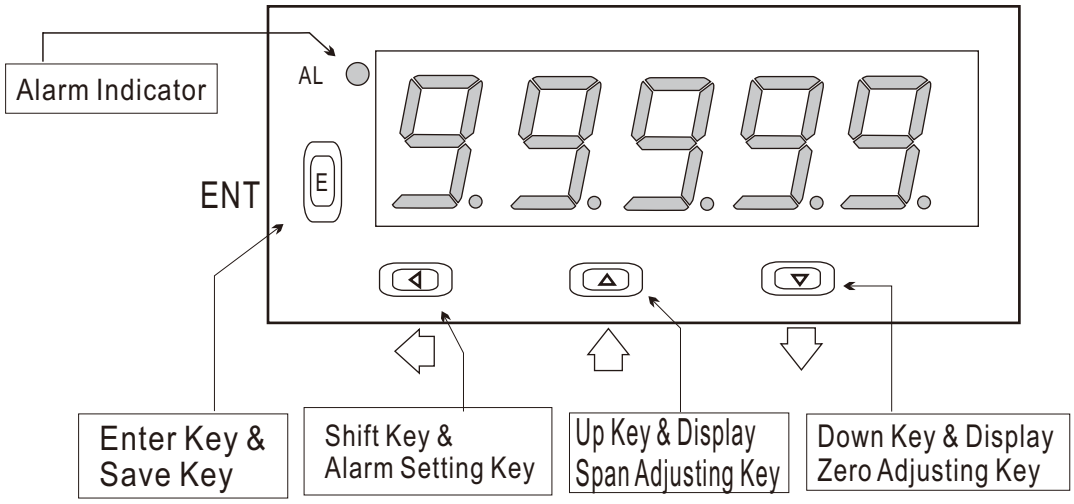
● 4 Wire Sensor or Load cell



AM5S-A 5 DIGITAL MICRO-PROCESS METER (24x48mm) with 1 ALARM MANUAL

✻ Please understand key indicators & functions at the first operation.

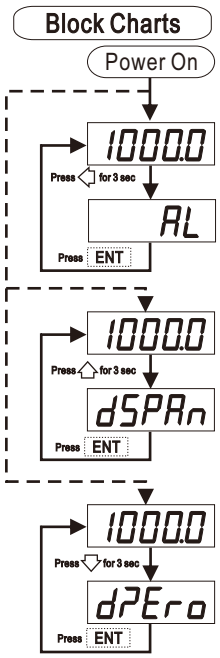
FRONT PANEL & KEY FUNCTIONS



Key Name	Symbol	Descriptions
Enter Key & Save Key	ENT	1. In the measuring status, press this key can enter to parameter pages. 2. In the parameter setting, press this key can save the value & go to next parameter.
Shift Key & Alarm Setting Key	◁	1. In the measuring status, press this key for 3 sec can enter to alarm setting page. (The selecting digit will be flashed) 2. In the parameter setting , press this key can move the cursor left.
Up Key & Display Span Adjusting Key	△	1.In the measuring status, press this key for 3 sec can enter to display value adjustment of "SPAN" 2. In the parameter setting, press this key can increase the digits.
Down Key & Display Zero Adjusting Key	▽	1.In the measuring status, press this key for 3 sec can enter to display value adjustment of "ZERO" 2. In the parameter setting , press this key can decrease the digits.

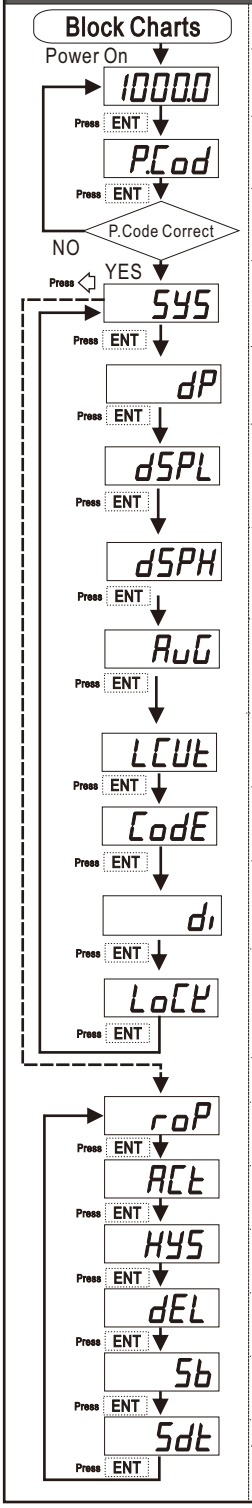
**1. The following block charts are parameters codes, parameter codes & parameters will alternate flashing if the parameters can be modified.
2. To modify the parameters, please press◁△▽, and press **ENT** to save the parameters after the modification.
3. Please don't forget the new pass code after modification.
4. In any pages, press△ &▽, or don't press any keys for 2 minutes that will back to measuring status.

GENERAL MODE OPERATING PROCEDURES



Display	Descriptions	Default
	Alarm Setpoint	
Measuring Status	Present value for measurement.	
Alarm (AL) Setpoint	Press ◁△▽ to modify the alarm setpoint.	00000
	Display: SPAN Adjustment	
Measuring Status	Present value for measurement.	
Display Span Adjustment (dSPAn)	Press ◁ to select adjusting speed rate, press △▽ to modify the span value. PS: To use this function to adjust the real span value.	00000
	Display: ZERO Adjustment	
Measuring Status	Present value for measurement.	
Display Zero Adjustment (dZEro)	Press ◁ to select adjusting speed rate, press △▽ to modify the zero value. PS: To use this function to adjust the real zero value.	00000

ENGINEER LEVEL OPERATING PROCEDURES



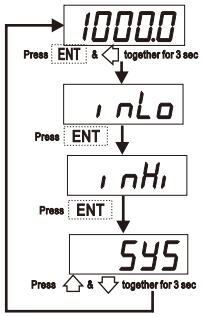
Display	Descriptions	Default
Measuring Status	Present value for measurement	
Pass Code (P.Cod)	Press ◁ △ ▽ to enter pass code.	00000
	Pass code is correct that will enter to parameter groups. Pass code is wrong that will back to measuring status.	
System Setting Page (SYS)	Press ◁ to select system setting group (SYS) or alarm setting group (roP). PS: This function is only available for Alarm output.	
Decimal Point Setting (dP)	Press ◁ △ ▽ to select decimal point (0, 1, 2, 3, 4) EX: if the value shows "0.00" that means the decimal point is 2 digits.	Customers specify
Display Low Scale Setting (dSPL)	Press ◁ △ ▽ to modify display low scale for the input signal zero value. EX: If the input signal is 4~20mA; 4mA is shown display 0.00, this parameter must be set for 000.00.	Customers specify
Display Hi Scale Setting (dSPH)	Press ◁ △ ▽ to modify display high scale for the input signal span value. EX: If the input signal is 4~20mA; 20mA is shown display 100.00, this parameter must be set for 100.00.	Customers specify
Display Average Setting (AvG)	Press ◁ △ ▽ to modify display average (1~99) PS: Please use this function for stable display value when input signal is unstable.	00005
Display Low Cut Settingn(LCUt)	Press ◁ △ ▽ to modify display low cut to 0(0~99)	00000
Pass Code Setting (CodE)	Press ◁ △ ▽ to modify pass code(0~19999) PS: Please don't forget the new pass code after modification.	00000
Control DI Setting (di)	Press △ ▽ to select control DI off(YES) or on(NO). PS: Control DI (Z, MAX, HD) & (COM) shorts, the functions starts.	no
Key Lock Setting (LoCK)	Press △ ▽ to lock the keys, using key lock function only can view the parameters, but cannot modify any values. PS: no(unlock) ,YES("ENT" unlock , others lock)	no
	Alarm Setting Group Procedures	
Alarm Setting Page (roP)	**The following steps are only available for alarm output.**	
Alarm Action Setting (ACt)	Press △ ▽ to modify alarm value that is ≧(Hi) or <(Lo) for alarm action.	Customers specify
Alarm Hysteresis Setting (HYS)	Press ◁ △ ▽ to modify the value, when alarm runs lower or higher display value (depends on alarm action) Alarm setpoint ± this value(0~999) will turn off the alarm.	00000
Alarm Run Delay Setting (dEL)	Press ◁ △ ▽ to modify the value, when the display value reach the alarm value that need to wait for this time (0~99 sec) for alarm action.	00000
Alarm Start Band Setting (Sb)	Press ◁ △ ▽ to modify the value (-99~+99), if the display value don't over this range; the alarm will not be act.	00000
Alarm Start Band Time Setting (Sdt)	Press ◁ △ ▽ to modify the value (0~99 sec), if the display value reach alarm start band value; the alarm will be act after this value (sec).(The function is used with "Sb" function.)	00000

Error Code of Self-Diagnosis

Display	Descriptions	Display	Descriptions
1oFL	Input signal is over 120% of input range.	doFL	Input signal is over display range (99999)
-1oFL	Input signal is under -20% of input range.	-doFL	Input signal is under display range (-19999)
AdEr	Input signal is over 180% of input range or meter error.	E-00	EEPROM reading /writing suffers the interference (about 1 million times)

**Please check the wiring connection is correct first, if the problem still exist, please return the meter to the factory.

CALIBRATION OPERATING PROCEDURES



Display	Descriptions	Default
Measuring Status	Present value for measurement Press **ENT** & ◁ together for 3 sec will enter to calibration operating procedures.	
Input Low Scale Calibration (inLo)	1. Input standard low scale signal. 2. Press ◁ △ ▽ to calibrate input low scale.	
Input Hi Scale Calibration (inHi)	1. Input standard hi scale signal. 2. Press ◁ △ ▽ to calibrate input hi scale.	
System Setting Page (SYS)	1. Finish calibration operating procedures will enter to system setting group. 2. Press △ & ▽ together to back to measuring status.	

Warning: Calibration of this meter requires a standard signal with 0.01% accuracy or better and an external meter with 0.005% accuracy or better.