DS6 SERIES
4 1/2 Current/voltage Meter

OPERATION GUIDE

Thanks for the purchasing our DS6 series Current /Voltage Meter.Please do read the manual before the use of the meterso that you could make a full acknowledge of our product and operate it correctly.The edition of the manual is RE-D-07A0.This manual is subject to change without notic.For any update,please visit our web www.pan-glboe.cn

1 Product Overview

Appearance

Characteristics

1. Strong anti-interference;
2. Single-row 5-bit LED 0.8 "digital LED display;
3. It can measure signal of DC /AC Current and voltage / potentiometer / PT100 transmitter, etc;
4. It has the function of keeping the general value \ maximum value,4 Sets alarm function;
5. 4 1 / 2 / RS-485 communications / standard signal measurement transmission;
6. Zeroing function.

2 Attention

⚠ Dangerous

1. Attention! Dangerous to sense!
2. Do not touch the power terminal after supply AC power, in order to avoid electric shocks.
3. When connect with instrument power, please make sure to power off!

⚠ Admonition

1. Please make sure of terminal position is correct before AC power supply in order to avoid of serious damage.
2. Please pre-determined power supply voltage and instrument specifications (AC85~265V or DC24V) correspond in order to avoid of serious damage.
3. Please confirm receipt of proper use of wiring (Input, Output, Alarm) terminals.
4. Please select of proper pressure terminal with the type of M3 screws.
5. Please do not be installed under the conditions of easy to interfere, corrosive gases, high temperature and humidity.
6. To avoid other interference, please keep the power wires supplied distance from power wire and load wire
7. When input the sensor is PT100, if we need to extend the lead wire, please use smaller impedance value, and the same wire.

3 Model identification

DS □ — □ — □ — □□ — □ — □

Size	Code
DIN48x96	6

Alam	Code
only display	0
one alarm	1
two alarms	2
three alarms	3
four alarms	4

Measurement signal	Code
DC voltage	DV
DC current	DA
AC Voltage	AV
AC current	AA
Resistance	R

Measured Range

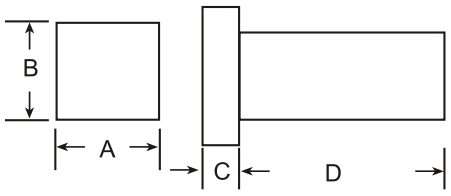
Tranmission	Code
NONE	0
4-20mA	I

communication	Code
NONE	0
RS485	R

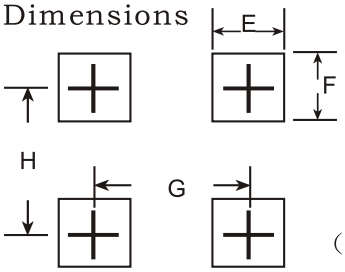
4 Installation and mounting

■ DS6

Appearance



Dimensions

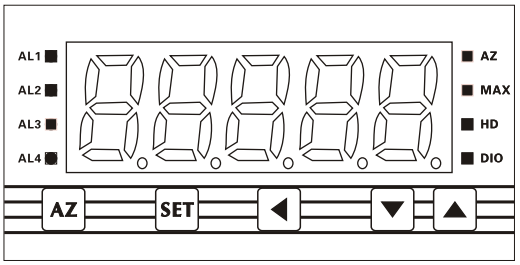


(UNIT: mm)

SIZE / TYPE	A	B	C	D	E	F	G	H
DS6	96	48	14	80	90+0.5	44+0.5	90	126

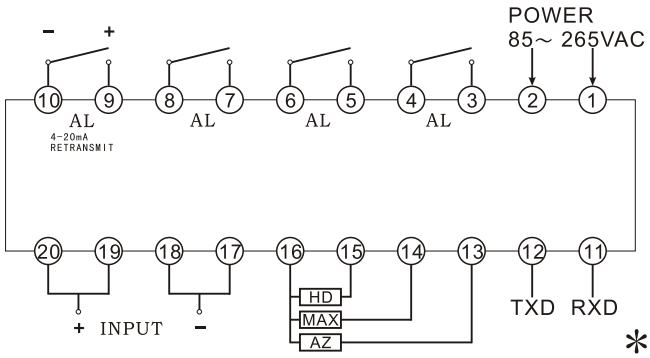
5 Panal characteristics

■ DS6



NO	Panal Words	Content Instruction
1	PV LED	Real measure data
2	AL1	Alarm 1 indicator
3	AL2	Alarm 2 indicator
4	AL3	Alarm 3 indicator
5	AL4	Alarm 4 indicator
6	AZ	Zero indicator
7	MAX	Display max indicator
8	HD	HOL indicator
9	DIO	RS485 indicator
10	AZ	AZ key
11	SET	Confirmation key
12	◀	Turn left key
13	▼	Decrease key
14	▲	Increase key

6 Connecting



✻ NOTE: The wiring diagrams obey the label on the back of this controller.

7 Characteristics index

Power voltage	AC85～265V 50/60Hz
Electron power consumption	＜5W
Relay contact capacity	250VAC/3A OR 30VDC/5A
Intepreted degree	1/20000
Insulated resistance	⩾100MΩ
Insulated intensity	1. 5KV/0. 5mA 1M
Group pulse interference	±1 .5KV
Viberation	10～55Hz; 0. 75mm
Environment	0～50℃, 35～85%RH(without ice)
Signal input	AA AV DA DV R
Long-time overload capacity	120%FS Overload diaplay "UUUU"
Measured range	Display -19999～20000
Presicion	0.2%FS ± 2DIGIT
Measured method	Average value
Sampling time	16 cycles/sec(max)

8 Operation

The first parameter set

Measurement
↓ Press ◀ Key
AL1 alarm value — Alarm 1 indication
↓ Press SET key 5SEC
1000 — Press▲▼ modify
↓ Press SET key 5SEC
AD1 AL1 alarm model — Alarm1 mode indication
↓ Press SET key 5SEC
H — Press▲▼ modify
↓ Press SET key 5SEC
AL2 alarm value — Alarm 2 indication
↓ Press SET key 5SEC
1000 — Press▲▼ modify
↓ Press SET key 5SEC
AD2 AL2 alarm model — Alarm2 mode indication
↓ Press SET key 5SEC
H — Press▲▼ modify
↓ Press SET key 5SEC
AL3 alarm value — Alarm 3 indication
↓ Press SET key 5SEC
1000 — Press▲▼ modify
↓ Press SET key 5SEC
AD3 AL3 alarm model — Alarm3 mode indication
↓ Press SET key 5SEC
H — Press▲▼ modify
↓ Press SET key 5SEC
AL4 alarm value — Alarm 4 indication
↓ Press SET key 5SEC
1000 — Press▲▼ modify
↓ Press SET key 5SEC
AD4 AL4 alarm model — Alarm4 mode indication
↓ Press SET key 5SEC
H — Press▲▼ modify
↓ Press SET key 5SEC
Measurement

The second parameter set

Measurement
↓ Press SET key 5SEC
t1 Alarm relay setting
↓ Press SET key 5SEC
00000
↓ Press SET key 5SEC
t2 Alarm relay setting
↓ Press SET key 5SEC
00000
↓ Press SET key 5SEC
t3 Alarm relay setting
↓ Press SET key 5SEC
00000
↓ Press SET key 5SEC
P measure value — The code of value
↓ Press SET key 5SEC
01. 000 — Press▲▼ modify
↓ Press SET key 5SEC
Decimal point — Decimal point sign
↓ Press SET key 5SEC
PPP. P — Press▲▼ modify
↓ Press SET key 5SEC
Low state point — Measurement value low
↓ Press SET key 5SEC
00000 — Press▲▼ modify
↓ Press SET key 5SEC
High state point — High state point sign
↓ Press SET key 5SEC
20000 — Press▲▼ modify
↓ Press SET key 5SEC
Filter value — Filter value sign
↓ Press SET key 5SEC
6 — Press▲▼ modify
↓ Press SET key 5SEC
HYalarm — Alarm hystersis
↓ Press SET key 5SEC
00000 — Press▲▼ modify
↓ Press SET key 5SEC
Communication low point — communication high point output sign
↓ Press SET key 5SEC
00000 — Press▲▼ modify
↓ Press SET key 5SEC
Communication hign point — communication high point output sign
↓ Press SET key 5SEC
20000 — Press▲▼ modify
↓ Press SET key 5SEC
Baud rate — Baud rate sign
↓ Press SET key 5SEC
9600 — Press▲▼ modify
↓ Press SET key 5SEC
ADDRESS — communication address
↓ Press SET key 5SEC
01 — Press▲▼ modify
↓ Press SET key 5SEC
LOCK — Lock function sign
↓ Press SET key 5SEC
0000 — Press▲▼ modify
↓ Press SET key 5SEC
Measurement

while LCK=0000 , all of the parameters can be revised .
while LCK=0001 ,all of the parameters can't be revised except LCK,AL1,AD1,AL2,AD2, AL3,AD3,AL4,AD4 .
while LCK=0110 , all of the parameters can't be revised except LCK .

✻ Whichever level when the controller stops in, it will back to measure status after stop operating in 1 minute. Indicate Display status. (Press▲and ▼ simultaneously , and it will back quickly after release measure status , display status)

9 Type and Technology parameter

◈ AV/DV digital voltage meter

Type	Measured range	Intepreted degree	Precise	singnal input	Instruction
DS6-AV100	100VAC	100mVAC	±0.2F.S ±2digit	direct input	A.C munual direct input inductor may change is100 V inputs
DS6-AV600	600VAC	10mVAC	±0.2F.S ±2digit	direct input	
DS6-DV20	20VDC	10mVDC	±0.2F.S ±2digit	direct input	
DS6-DV200	200VDC	10mVDC	±0.2F.S ±2digit	direct input	
DS6-DV500	500VDC	10mVDC	±0.2F.S ±2digit	direct input	

◈ AC/DC digital current meter

Type	Measured range	Intepreted degree	Precise	singnal input	Instruction
DS6-AA20	20AAC	1mAAC	±0.2F.S ±2digit	20A:5A	A.C munual inuctor may change is 5A, and D.C mun-ual inductor may change is 75mA
DS6-AA100	100AAC	10mAAC	±0.2F.S ±2digit	100A:5A	
DS6-AA200	200AAC	10mAAC	±0.2F.S ±2digit	200A:5A	
DS6-DA20	20ADC	1mADC	±0.2F.S ±2digit	20A:75mV	
DS6-DA50	50ADC	1mADC	±0.2F.S ±2digit	50A:75mV	
DS6-DA200	200ADC	10mADC	±0.2F.S ±2digit	200A:75A	