

General Specifications

Digital Indicator with alarms

DIGITAL 指示 警報器



The AE500 is a powerful digital indicator with up to four 4point alarms. The AE500 has various options such as digital communications, analog output, 2-wire transmitter power, waterproof.

SPECIFICATIONS

Input	a)Thermocouple: K, J, E, T, R, S, B, N(JIS/IEC) W5Re/W26Re(ASTM) U, L(DIN) b)RTD Pt100(JIS/IEC), JPt100(JIS) c)DC voltage 0-5, 1-5, 0-10V DC d)DC current 0-20, 4-20mA DC
PV Bias	-span to +span (Within -1999 ~ 9999)
Sampling time	0, 5 secretary
Measuring Accuracy	a)Thermocouple $\pm 0,3\%$ of reading +1digit $\pm 1^{\circ}\text{C}(2^{\circ}\text{F})$ *Accuracy is not guaranteed between 0-399 $^{\circ}\text{C}(0-799^{\circ}\text{F})$ for type R, S, B -100, 0 $^{\circ}\text{C}(-158, 0^{\circ}\text{F})$ for type T, U b)RTD $\pm 0,3\%$ of reading +1digit $\pm 0,8^{\circ}\text{C}(1,6^{\circ}\text{F})$ c)DC voltage and DC current $\pm 0,3\%$ of span +1 digit
Input impedance	a)Thermocouple: Approx. 1M Ω . b)RTD : Approx. 0, 01(%/ Ω)/reading
Output	Relay output :250V AC 2A C contact Current output :0-20, 4-20mA DC Load resistance : 400 Ω
Alarm(Up to 2Point)	A)Alarm type :Process High, Low Hold action B)Setting Range :Same as set value(SV) c)Differential gap :0-100 $^{\circ}\text{C}$ (Thermocouple) 0, 0-100, 0 $^{\circ}\text{C}$ (RTD) 0, 0-1000%voltage, Current d)alarm1, 2 Relay output 250V AC1A Alarm3, 4 Relay output 250V AC3A
Communications	a)method :Based on RS-485(2-wire) b)speed :2400, 4800, 9600, 19200BPS c)Protocol :ANSI X3, 28(1976)2, 5 A4 MODBUS d)Bit format Start bit : 1 Data bit : 7or8, for MODBUS 8bit Panty bit : Without, Odd or Even Stop bit : 1 or 2 e)code :ASCII (JIS) 7-bit code f)Maximum connection:31(Address0-99)
Waterproof/Dustproof	Ip65
Power supply	a)85-264V AC(Rating 100-240V 50/60Hz b)21-26V AC(Rating 24V 50/60Hz c)21-26V DC(Rating 24V
Power Consumption	a)Less than 4VA(110V), 7VA(240V) AC type b)Less than 4VA(24V) AC type c)Less than 100mA(24V) DC type
Operating Environments	0 - 50 $^{\circ}\text{C}(32-122^{\circ}\text{F})$, 45-85% RH
Memory Backup	Backed up by non-volatile memory. Number of writing, Approx. 100,000times
Weight	Approx. 250g
Mounting	Panel Mounting
Dimensions	W96 X H48 X D100mm

ORDERING CODE

MODEL : AE500A B C -D *E E
G H -I J /K /L Y

A B C Input and Range
See Range and Input Code Table

D Power Supply
3 : 24V C/DC
4 : 100 to 240V AC

E Alarm 1
N : Not supplied
 $\square$: See Alarm Code Table

F Alarm 2
N : Not supplied
 $\square$: See Alarm Code Table

G Alarm 3 / Analog output
N : Not supplied
 $\square$: See Alarm Code Table
7 : 0 to 20mA DC
8 : 4 to 20mA DC

H Alarm 4 /
N : Not supplied
 $\square$: See Alarm Code Table

I Digital communication
N : Not supplied
5 : RS-485

J Waterproof /Dustproof
N : Not supplied
1 : Waterproof /Dustproof protection

K Body color
A : Black
N : White

L 1 : 2wire trasmitter power DC 24V
N : standerd type

M INSTRUMENT VERSION
Y : Version symbol

RANGE AND INPUT CODE TABLE

Thermocouple input (Field-programmable)

Input	Code	Range
K	K 01	0 – 200°C
	K 02	0 – 400°C
	K 03	0 – 600°C
	K 04	0 – 800°C
	K 05	0 – 1000°C
	K 06	0 – 1200°C
	K 07	0 – 1372°C
	K 13	0 – 100°C
	K 14	0 – 300°C
	K 20	0 – 500°C
	K A1	0 – 800°F
	K A2	0 – 1600°F
	K A3	0 – 2502°F
	K A9	20 – 70°F
J	J 01	0 – 200°C
	J 02	0 – 400°C
	J 03	0 – 600°C
	J 04	0 – 800°C
	J 05	0 – 1000°C
	J 06	0 – 1200°C
	J A1	0 – 800°F
	J A2	0 – 1600°F
	J A3	0 – 2192°F
	J A6	0 – 400°F
R	R 01	0 – 1600°C
	R 02	0 – 1769°C
	R 04	0 – 1350°C
	R A1	0 – 3200°F
	R A2	0 – 3216°F
S	S 01	0 – 1600°C
	S 02	0 – 1769°C
	S A1	0 – 3200°F
B	S A2	0 – 3216°F
	B 01	400 – 1800°C
	B 02	0 – 1820°C
	B A1	800 – 3200°F
	B A2	0 – 3308°F

Type R, S and B input : Accuracy is not guaranteed between 0 and 399° C (0 and 749° F)
 Type T and U input : Accuracy is not guaranteed between -199.9 and -100.0° C (-199.9 and -158.0° F)
 DC current input : A 250 W resistor is externally connected to the input terminals.

Input	Code	Range
E	E 01	0 – 800°C
	E 02	0 – 1000°C
	E A1	0 – 1600°F
	E A2	0 – 1832°F
N	N 01	0 – 1200°C
	N 02	0 – 1300°C
	N A1	0 – 2300°F
	N A2	0 – 2372°F
T	T 01	-199.9 – 400.0°C
	T 02	-199.9 – 100.0°C
	T 03	-100 – 200.0°C
	T 04	0.0 – 350.0°C
	T A1	-199.9 – 752.0°F
	T A2	-100.0 – 200.0°F
	T A3	-100.0 – 400.0°F
	T A4	0.0 – 450.0°F
	T A5	0.0 – 752.0°F
W5Re / W26Re	W 01	0 – 2000°C
	W 02	0 – 2320°C
	W A1	0 – 4000°F
PL II	A 01	0 – 1300°C
	A 02	0 – 1390°C
	A 03	0 – 1200°C
	A A1	0 – 2400°F
	A A2	0 – 2534°F
U	U 01	-199.9 – 600.0°C
	U 02	-199.9 – 100.0°C
	U 03	0.0 – 400.0°C
	U A1	-199.9 – 999.9°F
	U A2	-100.0 – 200.0°F
L	U A3	0.0 – 999.9°F
	L 01	0 – 400°C
	L 02	0 – 800°C
	L A1	0 – 800°F
	L A2	0 – 1600°F

RTD input (Field-programmable)

Input	Code	Range
Pt100	D 01	-199.9 – 649.0°C
	D 02	-199.9 – 200.0°C
	D 03	-100.0 – 50.0°C
	D 04	-100.0 – 100.0°C
	D 05	-100.0 – 200.0°C
	D 06	0.0 – 50.0°C
	D 07	0.0 – 100.0°C
	D 08	0.0 – 200.0°C
	D 09	0.0 – 300.0°C
	D 10	0.0 – 500.0°C
	D A1	-199.9 – 999.9°F
	D A2	-199.9 – 400.0°F
	D A3	-199.9 – 200.0°F
	D A4	-199.9 – 100.0°F
	D A5	-100.0 – 300.0°F
	D A6	0.0 – 100.0°F
	D A7	0.0 – 200.0°F
	D A8	0.0 – 400.0°F
	D A9	0.0 – 500.0°F
Pjt100	P 01	-199.9 – 649.0°C
	P 02	-199.9 – 200.0°C
	P 03	-100.0 – 50.0°C
	P 04	-100.0 – 100.0°C
	P 05	-100.0 – 200.0°C
	P 06	0.0 – 50.0°C
	P 07	0.0 – 100.0°C
	P 08	0.0 – 200.0°C
	P 09	0.0 – 300.0°C
	P 10	0.0 – 500.0°C

Voltage/Current DC Input (Field-programmable)

Input	Code	Range
0–5V DC	4 01	0.0 – 100.0
1–5V DC	6 01	0.0 – 100.0
0–20mA DC	7 01	0.0 – 100.0
4–20mA DC	8 01	0.0 – 100.0
4–20mA DC(DC24V)	9 01	0.0 – 100.0

Alarm Code Table

Code	Type
H	Process High
J	Process Low
K	Process High with hold
L	Process Low with hold

EXTERNAL DIMENSIONS AND REAR LAYOUT

AE500

