

Product overview

- Multiple signal input
- Upper and lower limit alarm function, LED alarm display
- Multiple current and voltage signal output
- Permanent preservation of parameters setting even no power



Technical specifications

Display	
Nixie tube	Dual highlighted LED nixie tube digital display
Light cross	Analog display the percentage of measuring value

Input	
Thermal couple	B(400 ~ 1800°C)、S(0 ~ 1600°C) K(0 ~ 1300°C)、E(0 ~ 1000°C) T(-200.0 ~ 400.0°C)、J(0 ~ 1200°C) R(0 ~ 1600°C)、N(0 ~ 1300°C)、F2(700 ~ 2000°C) Wre3-25(0 ~ 2300°C)、Wre5-26(0 ~ 2300°C)
Thermal resistance	Cu50(-50.0 ~ 150.0°C)、Cu53(-50.0 ~ 150.0°C) Cu100(-50.0 ~ 150.0°C)、Pt100(-200.0 ~ 650.0°C) BA1(-200.0 ~ 600.0°C)、BA2(-200.0 ~ 600.0°C)
Liner resistance	0 ~ 400Ω、0 ~ 500Ω
Remote resistance	0 ~ 350Ω、30 ~ 350Ω
Direct voltage	0-20mV、0-40mV、0-100mV
Direct voltage	0-5V、1-5V、0-10V、0-5V square root、1-5V square root ; input resistance ≥510KΩ
Direct current	0-20mA、0-10mA、4-20mA、0-10mA square root、4-20mA square root ; input resistance ≥250Ω

Control/alarm output	
Indicator	The LED indicator light on under control/alarm output condition
Output	Control/alarm switch output, switch types are optional
	ALM relay contacts output, contact rating: AC220V/0.5A (small) DC24v/0.5a (small) (resistive load) AC220V/2A (big) DC24V/2A (big)(resistive load)
	ACR(K3/K6)—SCR zero trigger pulse output, capacity: AC400V/0.5A
	SSR(K4)— Solid-state relay control voltage output, capacity: DC12V/30mA
	SOT(K5)— Bidirectional controlled silicon on-off output, capacity: AC400V/7A

Transmitting output	
Direct voltage	DC 1-5V load resistance≥250KΩ (optional big resistance module, load resistance≥4KΩ)
Direct voltage	DC 0-5V load resistance≥250KΩ (optional big resistance module, load resistance≥5KΩ)
Direct voltage	DC 0-10V load resistance≥4KΩ
Direct current	DC 4-20mA load resistance≤600Ω
Direct current	DC 0-20mA load resistance≤600Ω
Direct current	DC 0-10mA load resistance≤1.2KΩ

Communication output	
Communication interface	Standard serial bidirectional communication interface: RS485 one, two wire, communication distance≤1000 meters RS232 one, three wire, communication distance≤15 meters
Communication protocol	Standard Modbus RTU communication protocol, 1 start bit, 8 data bits, 1 stop bit, without parity check, baud rate 1200~9600bps
Print output	
Printing interface	RS232—one, three wire, communication distance≤15 meters Adapter miniature serial printer, 16 bits, baud rate 1200~9600bps

Feed output	
Voltage output	DC24V±1V
Current output	≤30mA(load resistance≥750Ω)

Power	
Switch power	AC/DC100~240V, frequency 50/60Hz, power consumption≤5W
Switch power	DC20 ~ 29V DC20~29V, power consumption≤3W

Operating environment	
Temperature	0 ~ 50°C
Temperature	10~90%RH, avoid strong corrosive substance

Features	
Temperature drift	≤0.01%FS/°C(typical value: about 50ppm/°C)
Single-channel sampling period	500ms
Compression strength	Input/output/power/communication(1000W.AC/min)
Insulating strength	Input/output/power/communication≥100MΩ
EMC	IEC61000-4-4(EFT), ±4KV/5KHZ; IEC61000-4-5(Surge), mode 4KV, differential mode 2KV
Setting method	Digital setting with light touching the panel. Permanent preservation of parameters setting even without power
Protection method	Alarm if input circuit burn-out, input signal over/less than measuring range

Select instruction

Display instrument	Code	Code description	
Types	LG8	Digital display instrument	O
Separator	-	Detailed specifications as following	
Overall dimension	A	160*80*110mm(Horizontal type)	O
	B	80*160*110mm(Vertical type)	O
	C	96*96*110mm(Quadrate type)	O
	D	96*48*110mm(Vertical type)	O
	E	48*96*110mm(Horizontal type)	O
	F	72*72*110mm(Quadrate type)	O
	H	48*48*110mm(Quadrate type)	O
Input signal	()	Input type, refer to input signal table	O
	55	Full-switching signal input, refer to input signal table	O
Output signal	0	None	O
	1	4-20mA(RL≤600Ω)	O
	2	1-5V(RL≥250KΩ)	O
	3	0-10mA(RL≤1.2KΩ)	O
	4	0-5V(RL≥250KΩ)	O
	5	0-20mA(RL≤600Ω)	O
	K1	Relay contact output	O
	D1	RS-485 communication interface(Modbus)	O
	Y1	Others	Discuss
Alarm output quantity	0	None	O
	1	One way alarm output	O
	2	Two way alarm output	O
	3	Three way alarm output (Not all combination is effective, please confirm with us before ordering)	O
	4	Four way alarm output (Not all combination is effective, please confirm with us before ordering)	O
Feed output	0	None	O
	1P	One way DC24V feed output	O
Power	A	AC100-220V	O
	D	DC24V	O
-	-	Additional selection (No code if no selection)	
Display digits	5	5 display (Default 4 display if no coding)	Discuss
Example	LG8-D55K121PA		

Input signal table			
0	B(400~1800°C)	18	Remote resistance 0~350Ω(-1999~9999)
1	S(0~1600°C)	19	Linear resistance 0~400Ω(-1999~9999)
2	K(0~1300°C)	20	0~20mV(-1999~9999)
3	E(0~1000°C)	21	0~40mV(-1999~9999)
4	T(-200~400°C)	22	0~100mV(-1999~9999)
5	J(0~1200°C)	23	Retention
6	R(0~1600°C)	24	Retention
7	N(0~1300°C)	25	0~20mV(-1999~9999)
8	F2(700~2000°C)	26	0~10mV(-1999~9999)
9	Wre3-25(0~2300°C)	27	4~20mV(-1999~9999)
10	Wre5-26(0~2300°C)	28	0~5V(-1999~9999)
11	Cu50(-50~150°C)	29	1~5V(-1999~9999)
12	Cu53(-50~150°C)	30	Retention
13	Cu100(-50~150°C)	31	0~10V(-1999~9999)
14	Pt100(-200~650°C)	32	0~10mA square root(-1999~9999)
15	BA1(-200~600°C)	33	4~20mA square root(-1999~9999)
16	BA2(-200~600°C)	34	0~5V square root(-1999~9999)
17	Linear resistance 0~400Ω(-1999~9999)	35	1~5V square root(-1999~9999)