

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(Horizontal type) | O |
| | E | 48*96*110mm(Vertical 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) |