

# Data sheet

|                                    |  |
|------------------------------------|--|
| Display method                     | 4-digit 7-segment LED  |
| Control method                     | ON/OFF, P, PI, PD, PID   |
| Input specification                | Thermocouple: K(CA), J(IC), E(CR), T(CC), B(PR), R(PR), S(PR), N(NN), C(TT), G(TT), L(IC), U(CC), Platinel II<br>RTD: DPT100Ω, DPT50Ω, JPT100Ω, Cu100Ω, Cu50Ω, Nickel 120Ω<br>Analog: 0-100mV, 0-5V, 1-5V, 0-10V<br>0-20mA, 4-20mA |
| Sampling cycle                     | 50ms   |
| Control output 1                   | Relay(250VAC~ 3A)  |
| Option input                       | CT, Digital(DI-1)  |
| Option output                      | Alarm 1/2, RS485 comm.   |
| Power supply                       | 100-240VAC ~ 50/60Hz   |
| Protection structure               | IP65(front panel)  |
| Display accuracy _ RTD             | <ul style="list-style-type: none"> <li>At room temperature(23°C±5°C):(PV ±0.3% or ±1°C, select the higher one) ±1-digit</li> <li>Out of room temperature:(PV ±0.5% or ±2°C, select the higher one) ±1-digit</li> </ul>             |
| Display accuracy _ Thermocouple    | <ul style="list-style-type: none"> <li>At room temperature(23°C±5°C):(PV ±0.3% or ±1°C, select the higher one) ±1-digit</li> <li>Out of room temperature:(PV ±0.5% or ±2°C, select the higher one) ±1-digit</li> </ul>             |
| Display accuracy _ Analog          | <ul style="list-style-type: none"> <li>At room temperature(23°C±5°C): ±0.3% F.S. ±1-digit</li> <li>Out of range of room temperature: ±0.5°C% F.S. ±1-digit</li> </ul>  |
| Display accuracy _ CT input        | ±5% F.S. ±1-digit  |
| Hysteresis(adjustable sensitivity) | RTD/Thermocouples: 1 to 100°C/°F(0.1 to 100.0°C/°F) variable Analog: 1 to 100-digit  |
| Proportional band                  | 0.1 to 999.9°C/°F(0.1 to 999.9%)   |
| Integral time                      | 0 to 9999 sec  |
| Derivative time                    | 0 to 9999 sec  |
| Control period                     | Relay output, SSR drive output: 0.1 to 120.0 sec Current output or SSR drive output selectable: 1.0 to 120.0 sec   |
| Manual reset                       | 0.0 to 100.0%  |
| Environment _ Ambient temperature  | -10 to 50°C, storage: -20 to 60°C  |
| Environment _ Ambient humidity     | 35 to 85% RH, storage: 35 to 85% RH  |
| Insulation type                    | Double insulation or reinforced insulation(mark:  , dielectric strength between the measuring input part and the power part: 2kV)               |
| Weight                             | Approx. 150g(approx. 105g)   |

※"S" represents SSR drive output support models which SSRP function (standard ON/OFF control, cycle control, phase control) are available. "C" represents selectable current and SSR drive output support models.

※Select "R" or "C" type in case of using heating&cooling control and "N" type in case of using standard control.

※CT input of TK4N is available only for the standard model which has alarm output 1.

※Display accuracy:

◎At room temperature (23°C±5°C)

▪ Thermocouple K, J, T, N, E type, below -100°C/Thermocouple L, U, PL II type, RTD Cu50Ω, DPT50Ω: (PV ±0.3% or ±2°C, select the higher one) ±1-digit

▪ Thermocouple C, G, R, S type, below 200°C: (PV ±0.3% or ±3°C, select the higher one) ±1-digit

▪ Thermocouple B type, below 400°C: there is no accuracy standards.

◎Out of room temperature range

▪ RTD Cu50Ω, DPT50Ω: (PV ±0.5% or ±3°C, select the higher one) ±1-digit

▪ Thermocouple R, S, B, C, G type: (PV ±0.5% or ±5°C, select the higher one) ±1-digit

▪ Others, Below -100°C: within ±5°C

In case of TK4SP Series, ±1°C will be added to the degree standard.

※The weight includes packaging. The weight in parenthesis is for unit only.

※Environment resistance is rated at no freezing or condensation.