# Data sheet

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| 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, Nikel 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 |
| Power supply | 100-240VAC~ 50/60Hz |
| Protection structure | IP65(front panel) |
| Display accuracy_RTD | ▪At room temperature(23℃±5℃):(PV ±0.3% or ±1℃, select the higher one) ±1-digit<br>▪Out of room temperature:(PV ±0.5% or ±2℃, select the higher one) ±1-digit |
| Display accuracy_Thermocouple | ▪At room temperature(23℃±5℃):(PV ±0.3% or ±1℃, select the higher one) ±1-digit<br>▪Out of room temperature:(PV ±0.5% or ±2℃, select the higher one) ±1-digit |
| Display accuracy_Analog | ▪At room temperature(23℃±5℃): ±0.3% F.S. ±1-digit<br>▪Out of range of room temperature: ±0.5℃% F.S. ±1-digit |
| Display accuracy_CT input | ±5% F.S. ±1-digit |
| Hysteresis (adjustable sensitivity) | RTD/Thermocouples: 1 to 100℃/℉(0.1 to 100.0℃/℉) variable Analog: 1 to 100-digit |

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| Proportional band | 0.1 to 999.9℃/℉(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℃, storage: -20 to 60℃ |
| 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. 210g(approx. 140g) |

※"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℃±5℃)
▪ Thermocouple K, J, T, N, E type, below -100℃/Thermocouple L, U, PL II type, RTD Cu50Ω, DPt50Ω: (PV ±0.3% or ±2℃, select the higher one) ±1-digit
▪ Thermocouple C, G, R, S type, below 200℃: (PV ±0.3% or ±3℃, select the higher one) ±1-digit
▪ Thermocouple B type, below 400℃: there is no accuracy standards.
◎Out of room temperature range
▪ RTD Cu50Ω, DPt50Ω: (PV ±0.5% or ±3℃, select the higher one) ±1-digit
▪ Thermocouple R, S, B, C, G type: (PV ±0.5% or ±5℃, select the higher one) ±1-digit
▪ Others, Below -100℃: within ±5℃
In case of TK4SP Series, ±1℃ 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.