**Remote System User’s Guide**

**Remote Sensor System**
Switch signal / 8 signal transmission type

**Transmitter:** RGPT-4008-V1220 A/B-PU
**Output Sensor:** RGPE-4008-V1220N A/B-PU
RGPE-4008-V1220P A/B-PU

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**Attention for Installation**
(Read this section thoroughly before installation.)
Before using the Remote Sensor, read this manual carefully. During installation and operation, pay close attention to the safety aspect.

- Ensure the power is switched off during installation or maintenance operations.
- Use a regulated power supply, e.g. switch-mode type. Simpler power supplies, such as a full-wave rectification type, will cause the permissible ripple rating to be exceeded and may cause malfunction.
- Ensure correct connections by reference to the wiring diagram.
- To avoid malfunction caused by induction noise, cable should be kept apart from motor or other power cable.
- When the noise (ABS or AB+PET) is used to the case or the transmission surface, please be sure to avoid organic solvent or liquid containing them to splash over.
- Please install cable end “wiring part” in so that there is no water and cutting fluid. (Water is transmitted to the internal from the cable core, there is a possibility of causing a problem such as short circuit or corrosion)
- Please do not face the output sensor to a metal at all times to avoid metal overheating or damage of the components.
- Please note that the signal may become unstable (false signal or chattering) when the transmission distance and the center offset are outside the specification range.
- The inzone signal is a preliminary signal for confirming that the output signal is established within the specification range. Please note that it does not guarantee signals output outside the specification range.

**Construction of the system**

- **Function of each component**
  - **Detector:** Connects detector switches (max.8) and transmits the detected signals to Transmitter.
  - **Transmitter:** Provides power for Detector, also passes detected signals from Detector to Output Sensor.
  - **Output Sensor:** Puts out detected signal to external controller, also sends power for operating Detector and Transmitter.

**Wiring diagram**

**Connecting PNP type switches**

**Connecting NPN type switches**

**Connecting DC 24V type switches**

**Influence of surrounding metal**
To avoid influence of surrounding metal, keep minimum spacing as described below:

- **Active surface A (front):** A, B
- **Active surface B (top):** C, D

**Mutual interference**
In order to prevent mutual interference between parallel-mounted sensors, keep minimum spacing as described below:

- **Non-flush mounting**
- **Never pull the cable strong in installing.**

**Installation**
The minimum bending radius for the sensors are 50mm.

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**Specification**

- **Type number:** RGPE-4008-V1220 A/B/PU
- **Rated transmitting distance:** 3~8mm
- **Sensor offset:** ±1.5mm
- **Drive voltage:** DC 24V ± 10%
- **Supply voltage:** DC 24V ± 10%
- **Current consumption:** ±50mA

**Transmitting area diagram**

**Example:** Supply voltage at 24V DC

**Drive current:** ±200mA

**Note**

- Please note that the cable length of an output sensor may not longer than 10m. The CE marking verifies that our products comply with the requirements of EMC directive. The surge test to an output sensor is not carried out. When using an output sensor with cable length longer than 10m, a measure to protect the sensor from surge current should be taken.

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