

# Paperless Recorder on the PC

# PC RECORDER

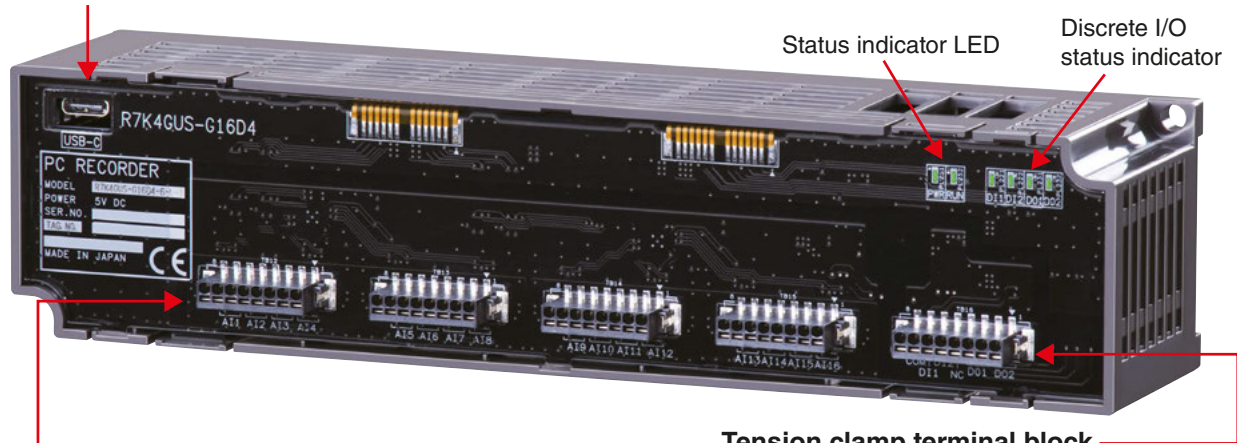
- USB Type-C bus powered: no external power supply needed
- Event-triggered recording
- Enhanced screens: Overview, Event View and Report File Display



# No External Power Supply Needed!

## Paperless Recorder that is as easy to use as a digital multimeter

USB connector for power supply and communication (USB Type-C)



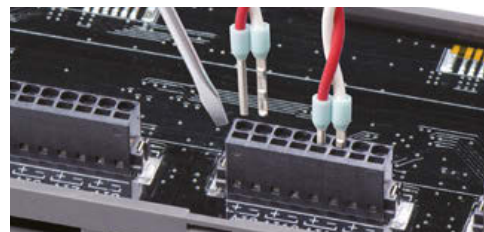
### Analog input measuring range (16 points)

Measuring range is selected by every 8 points when ordering.

Three measuring ranges:

- Wide span range:  $\pm 10$  V DC to  $\pm 0.8$  V DC
- Middle span range:  $\pm 0.8$  V DC to  $\pm 80$  mV DC
- Narrow span range:  $\pm 80$  mV DC to  $\pm 10$  mV DC

### Tension clamp terminal block



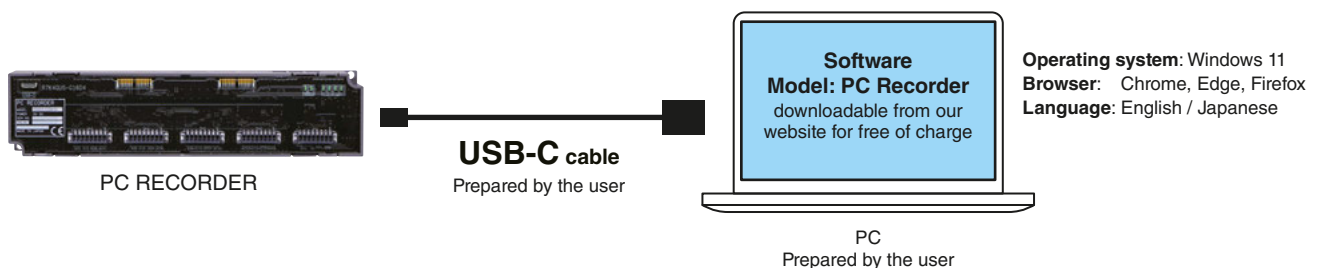
Easy-to-wire tension clamp terminals for I/O signals

Probes, alligator clips and other tools must be prepared by the user.

## PC Recorder

**Model: R7K4GUS-G16D4**

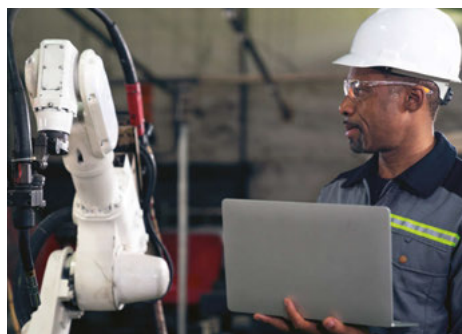
### What You Need to Start Data Recording



### Application Examples



Type testing (e.g. thermostatic chamber)



Equipment failure analysis



Laboratory testing on moving vehicles

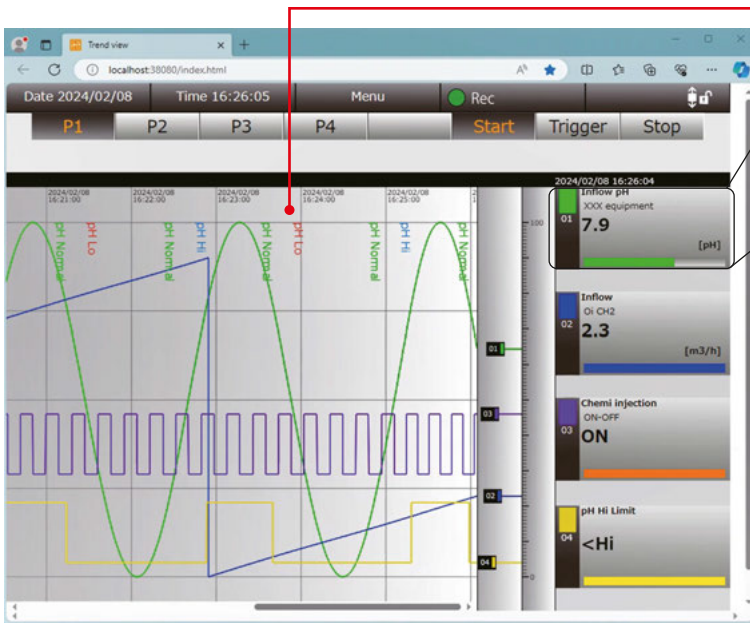
# Enhanced Screens Beside the Trend Graph

The operability of PC Recorder follows that of the existing products of Web Data Logger and Tablet Recorder which have already been used and familiar to many users.

## GRAPH Trend View

There are four trend graph pages, each of which contains 4 pens (16 pens in total). Each pen is assigned to any channel of all I/Os (Ai / Di / Oi / Do). Zone name, zone color, event comment, alarm output, delay timer, trigger recording and reset function value, can be specified to each analog input channel (Ai) and operation input channel (Oi).

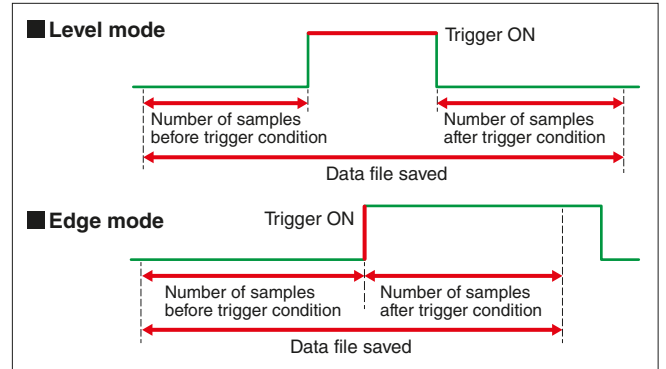
### Trend Display Functions



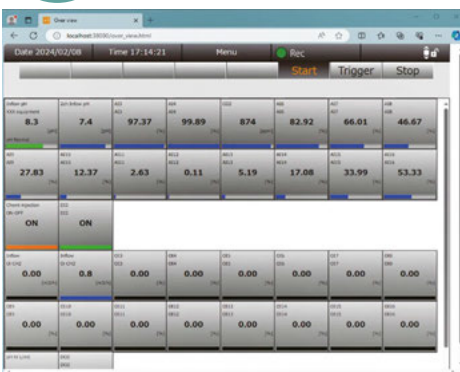
Number of pens	16 (4 pens per page)
I/O channels assigned to pens	Ai, Di, Oi, Do (all channels)
Graph scale	0% and 100% positions specified by engineering unit values
Data format	.TRD file format
Data contents	Trend, event history, comment history
Data size	Max. 50000 samples per file x 16 pens
Auto-start	Recording can start automatically when the program is started. Specify either Stop / Normal / Trigger.
Storing interval	100, 500 ms, 1, 2, 5, 10 s, 1, 2, 5, 10, 30 min, 1 hour

### Trigger Recording

User can preset specific trigger conditions to certain analog/digital/operation channels, and choose how many data samples before and after an event condition is triggered, must be recorded. It is an effective way to save only the necessary data for failure monitoring and analysis. Two operation modes are available: "Level" mode and "Edge" mode.



## ALL CHANNELS Overview



All channels are updated and displayed on the overview screen. For analog input channels, engineering unit values and percent values are toggled by clicking over the display.

## LATEST EVENTS Event View

The latest 500 events, triggers, alarms are listed among the analog and operation input signal channels.

## REPORT FORMS Report File

Report file data is generated every hour on the hour (1H data). Sampling method can be selected from momentary / average / maximum / minimum values.

## MAIN SPECIFICATIONS

### APPLICATION SOFTWARE

**Model:** PC Recorder  
Downloadable from our website for free of charge

**Operating system:** Windows 11

**Browser:** Chrome, Edge, Firefox

**Language:** English / Japanese

### COMMUNICATION

**Media:** USB

**Number of connections:** 1

### GENERAL SPECIFICATIONS

#### Connection

**Power input, communication:** USB Type-C connector (female) (USB cable provided by user)

**I/O:** Tension clamp terminal

**Isolation:** Analog input to discrete input or output to USB connector (power input or communication)

#### ANALOG INPUT (Ai)

**Input signal:** DC voltage, 16 points (2 ranges by 8 points among wide span, middle span and narrow span specified when ordering)

**Wide span voltage:**  $\pm 10$  V DC to  $\pm 0.8$  V DC

**Middle span voltage:**  $\pm 0.8$  V DC to  $\pm 80$  mV DC

**Narrow span voltage:**  $\pm 80$  mV DC to  $\pm 10$  mV DC

**Sampling rate:** 100 ms

#### OPERATION INPUT (Oi)

Mathematical and other functions can be applied to analog input values using ratios and constants.

**Function:** Addition/Subtraction / Multiplication / Division / Extraction of square root / Moving average / First order lag / exp / Common logarithm / Natural logarithm / Peak hold (maximum) / Peak hold (minimum) / Power / Analog integration / F-value operation / Antilogarithm / Scaling / Time

### DISCRETE INPUT (Di)

**Common:** Negative common (PNP) per 2 points

**Rated detecting voltage:** Approx. 5 V DC (internal supply)

**Sampling rate:** 100 ms

### DISCRETE OUTPUT (Do)

**Photo MOSFET relay:** 2 points

**Rated load voltage:** 48 V peak AC/DC

**Output timing:** 100 ms

### INSTALLATION

**Current consumption:**  $\leq 120$  mA

5 V DC power input by USB bus powered (high powered device)

**Operating temperature:**  $-10$  to  $+55^{\circ}\text{C}$  ( $14$  to  $131^{\circ}\text{F}$ )

**Storage temperature:**  $-20$  to  $+65^{\circ}\text{C}$  ( $-4$  to  $+149^{\circ}\text{F}$ )

**Operating humidity:** 30 to 90 %RH (non-condensing)

**Mounting:** Desktop, surface or DIN rail (35 mm rail)

**Weight:** 150 g (0.33 lb)

### PERFORMANCE

**Conversion accuracy:**  $\pm 0.1$  % (narrow span voltage input  $\pm 20$  mV DC:  $\pm 0.2$  %,  $\pm 10$  mV DC:  $\pm 0.3$  %)

**Conversion rate:** 4 msec.

**Temp. coefficient:**  $\pm 0.015$  % / $^{\circ}\text{C}$  ( $\pm 0.008$  % / $^{\circ}\text{F}$ ) ( $\pm 0.03$  % / $^{\circ}\text{C}$  [ $\pm 0.02$  % / $^{\circ}\text{F}$ ] with  $\pm 10$  mV DC)

**Insulation resistance:**  $\geq 100$  M $\Omega$  with 500 V DC

**Dielectric strength:** 1500 V AC @ 1 minute (analog input to discrete input or output to USB connector (power input or communication))

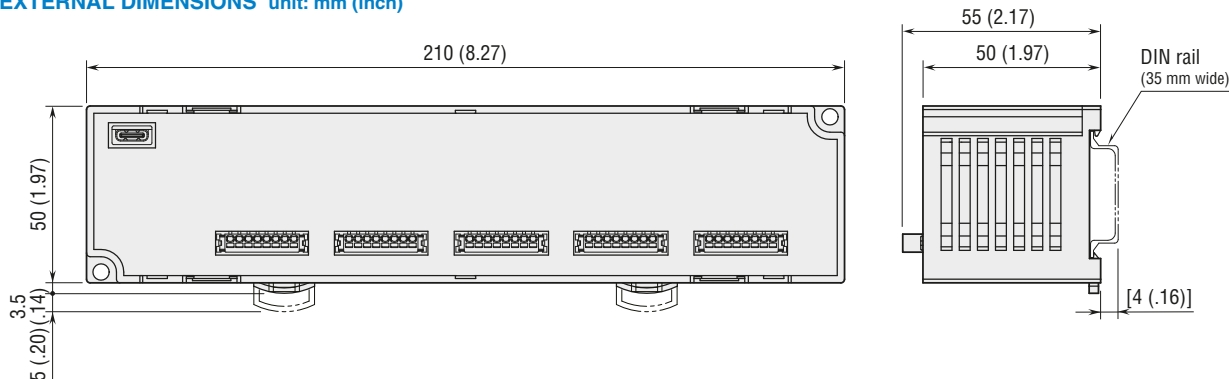
### STANDARDS & APPROVALS

**EU conformity:** EMC Directive

EMI EN 61000-6-4

EMS EN 61000-6-2

### EXTERNAL DIMENSIONS unit: mm (inch)



Website



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