

# 50 mm Hybrid Recorder



## KRN50 Series CATALOG

For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.

The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.

### Features

- 50mm thermal transfer method of paper recorder
- Enables to record data without paper with the data logger function
- Support two recording modes: graph mode, digital mode
- Simultaneous recording of two channels
- Enables to set parameters and monitor with RS485 communication and dedicated communication port
- Multi-input with high accuracy 0.2% level (RTD, TC, Voltage, Current (shunt))
- Supports various option I/O function
- Small size (W96×H96×L100mm), light weight

### Ordering Information

This is only for reference.  
For selecting the specified model, follow the Autonics website.

**KRN50** - ① 0 0 ② - ③ ④

#### ① No of input channel

01: 1 CH  
02: 2 CH

#### ② Alarm output

0: None  
2: 2  
4: 4

#### ③ Option output

0: None  
4: RS485 communication output

#### ④ Power supply

0: 100-240 VAC~ 50/60 Hz  
1: 24 VDC==

### Software

Download the installation file and the manuals from the Autonics website.

#### ■ DAQMaster

It is the comprehensive device management program for Autonics' products, providing parameter setting, monitoring and data management.

### Product Components

- Product
- Recording paper × 2
- Bracket × 2
- User manual
- 50 Ω B class (0.1 %) high-accuracy resistor × 2

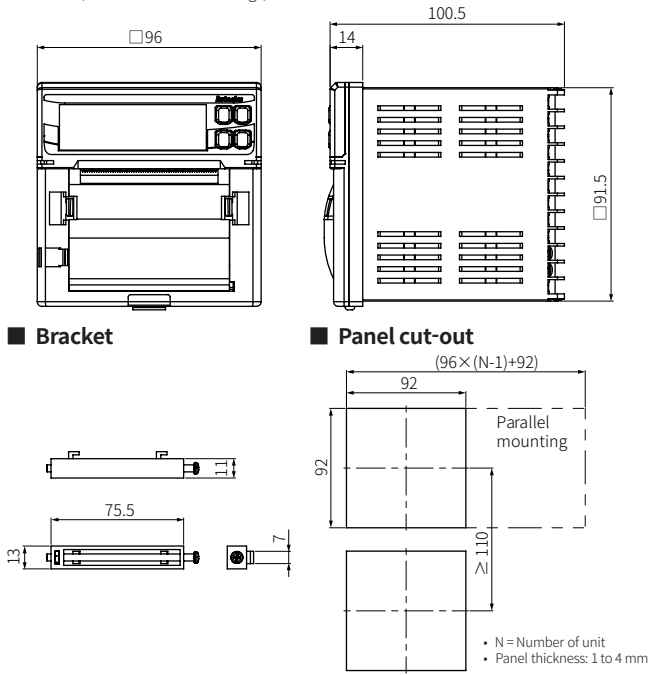
### Specifications

| Series                                     | KRN50  |
|--|--|
| <b>LCD type</b>                            | LCD dot matrix display   |
| <b>Resolution</b>                          | 128 × 32 pixel   |
| <b>No of input channel</b>                 | 1 / 2 CH model   |
| <b>Input type</b>                          | Refer to 'Input/Output' for detailed information.  |
| <b>Alarm output</b>                        | CH1 (AL1, AL2), CH2 (AL1, AL2) relay output  |
| <b>Alarm output adjustment sensitivity</b> | Alarm output ON/OFF interval setting: 1 to 999 digit variable  |
| <b>Communication output</b>                | RS485 communication output (Modbus RTU protocol method)  |
| <b>Setting method</b>                      | Setting with front key   |
| <b>Sampling cycle</b>                      | 500 ms/CH (2 CH = 1,000 ms)  |
| <b>Recording accuracy</b>                  | ± 0.5 % F.S.   |
| <b>Graph mode recording speed</b>          | 10, 30, 60, 120, 240, 480, 960 mm/H  |
| <b>Graph mode memo speed</b>               | 30 s, 1 min, 5 min, 10 min, 15 min, 30 min, 1 hour, 2 hour, 3 hour, 4 hour, 8 hour, 16 hour, 24 hour |
| <b>TEXT mode recording speed</b>           | 00m 05s to 99m 59s   |
| <b>Recording paper</b>                     | Thermal Direct Receipt Paper (57 mm × 16 m)  |
| <b>Recording paper supply method</b>       | Clamshell type   |
| <b>Print method</b>                        | Direct thermal line print  |
| <b>Print resolution</b>                    | 80 dot/mm  |
| <b>No. of print dot</b>                    | 384 dot/Line   |
| <b>Print life cycle</b>                    | 50 km  |
| <b>Language</b>                            | Korean, English  |

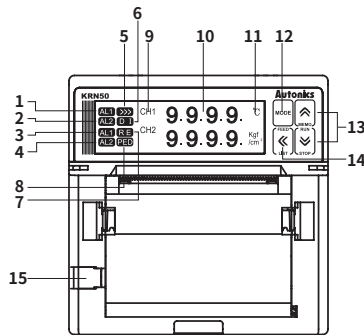
|                                | AC voltage type  | DC voltage type             |
|--------------------------------|--|-----------------------------|
| <b>Power supply</b>            | 100-240 VAC~ 50/60 Hz  | 24 VDC==                    |
| <b>Allowable voltage range</b> | 85 to 110 % of power supply  | 90 to 110 % of power supply |
| <b>Power consumption</b>       | ≤ 34 VA  | ≤ 79 W                      |
| <b>Dielectric strength</b>     | 2300 VAC~ 50/60 Hz for 1 minute (charging terminal of the different polarity)                      |                             |
| <b>Vibration</b>               | 0.75 mm amplitude at frequency of 10 to 55 Hz (for 1 min) in each of X, Y, Z directions for 1 hour |                             |
| <b>Insulation resistance</b>   | ≥ 100 MΩ (500 VDC== megger)  |                             |
| <b>Noise immunity</b>          | Square shaped noise by noise simulator (pulse width 1 μs) ±2 kV                                    |                             |
| <b>Ambient temperature</b>     | 0 to 50 °C, storage: -20 to 60 °C (no freezing or condensation)                                    |                             |
| <b>Ambient humidity</b>        | 35 to 85 %RH, storage: 35 to 85 %RH (no freezing or condensation)                                  |                             |
| <b>Approval</b>                | CE ENEC  |                             |
| <b>Unit weight</b>             | ≈ 700 g  |                             |

## Dimensions

- Unit: mm, For the detailed drawings, follow the Autonics website.



## Unit Descriptions



- Channel 1 alarm (AL1) output indicator:** Turns ON when AL1 of input channel 1 operates.
- Channel 1 alarm (AL2) output indicator:** Turns ON when AL2 of input channel 1 operates.
- Channel 2 alarm (AL1) output indicator:** Turns ON when AL1 of input channel 2 operates.
- Channel 2 alarm (AL2) output indicator:** Turns ON when AL2 of input channel 2 operates.
- Recording start / stop indicator:** turns ON when recording starts and turns ON when recording stops.
- Digital input indicator:** Turns ON when setting digital input.
- Recording reservation indicator:** turns ON when recording reservation operates.
- Recording paper status indicator:** turns ON in running out of recording paper during recording.
- Channel display part:** Displays input channel of currently displayed PV on the PV display part.
- PV display part:** In RUN mode, displays PV of the current channel and in setting mode, displays parameters and mode setting values.
- Unit display part:** Displays unit of relevant channel
- [MODE] key:** Used to enter setting mode and changing SV mode.
- Navigation key:** Used to move parameters or increase/decrease digits.
  - key: Digital memo key
  - key: Recording Run/Stop key
- Left arrow key:** Used to move parameters to upper group or move digits.
  - key: Paper feeding key (STOP), printing parameter setting information key (RUN)
- PC loader port:** It is a PC loader port for serial communication to set or monitor parameters by PC. Used to connect SCM-US (USB to Serial converter, sold separately).