

# 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

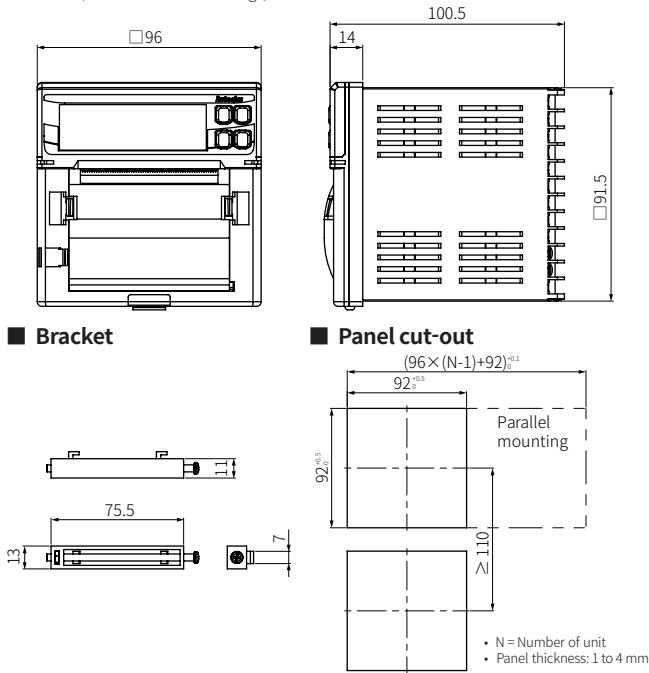
### Specifications

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

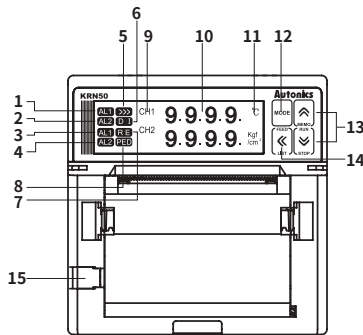
	AC voltage type	DC voltage type
Power supply	100-240 VAC~ 50/60 Hz	24 VDC==
Allowable voltage range	85 to 110 % of power supply	90 to 110 % of power supply
Power consumption	≤ 34 VA	≤ 79 W
Dielectric strength	2300 VAC~ 50/60 Hz for 1 minute (charging terminal of the different polarity)	
Vibration	0.75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