

# LCD Touchscreen Paperless Recorder



## KRN1000 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

- 5.6-inch color TFT LCD (640 × 480) touchscreen display with excellent readability and intuitive control interface
- Supports maximum 16 input channel and 27 input types
- Various communication methods (default option: RS422 / 485, Ethernet, USB)
- 25 to 250 ms high-speed sampling, 1 to 3600 sec recording cycle
- 200 MB internal memory and external SD / USB memory (up to 32 GB) support
- Store and backup internal data to external SD / USB memory
- 9 different graph types available
- 4 types of option input / output available: digital input (non-contact / contact), alarm output, power output for transmitter
- Compact, space-saving design (depth: 69.2 mm)

### Ordering Information

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

**KRN1000 - ① ② 1 - 0 S**

#### ① Number of input CH

04: 4 CH  
08: 8 CH  
12: 12 CH  
16: 16 CH

#### ② Option input / output

0: None  
1: Alarm relay output 8 CH  
2: Alarm relay output 6 CH + digital input 2 CH  
3: Alarm relay output 6 CH + 24 VDC= power for transmitter  
4: Alarm relay output 4 CH + digital input 2 CH + 24 VDC= power for transmitter

### 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
- USB memory
- Instruction manual
- Bracket × 4
- Resistance (250 Ω)  
(N = input CHs)
- Basic model connector × 2
- Option model connector × 6

### Specifications

Series	KRN1000
Screen size	5.6 inch
LCD type	TFT Color LCD
Resolution	640 × 480 pixel
Brightness adjustment	3-level (Min. / Standard / Max.)
Touch	Resistive type
No of input channel	4 / 8 / 12 / 16 CH model
Universal input	Please refer to 'Input / Output' for detailed information about universal input.
Sampling cycle <sup>01)</sup>	1 to 4 CH: 25 ms / 125 ms / 250 ms, 5 to 16 CH: 125 ms / 250 ms
Recording cycle	1 to 3,600 sec
Internal memory	≈ 200 MB
External memory <sup>02)</sup>	SD / USB memory maximum 32 GB

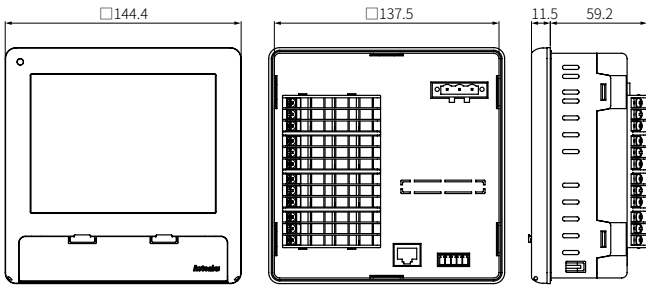
01) Internal sampling cycle is average movement filter and alarm output operation unit time.

02) USB memory is included in the box. If you use USB memory you purchased separately, it could not be recognized.

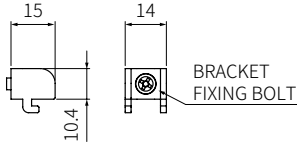
Power supply	100-240 VAC ~ 50 / 60 Hz
Allowable voltage range	85 to 110 % of rated power supply
Power consumption	≤ 23 VA
Dielectric strength	2,300 VAC ~ 50 / 60 Hz for 1 minute (between power terminals and case) (except Ethernet and USB device)
Vibration	10 to 60 Hz 4.9 m / s <sup>2</sup> X, Y, Z in each X, Y, Z direction for 1 hour
Vibration (malfunction)	10 to 60 Hz 1 m / s <sup>2</sup> X, Y, Z in each X, Y, Z direction for 10 minutes
Insulation resistance	≥ 20 MΩ (500 VDC= megger)
Noise immunity	Square shaped noise by noise simulator (pulse width 1 μs) ± 2 kV
Time accuracy	Within ± 2 min / year (available up to 2099 year)
Protection structure	IP50 (front part, IEC standard)
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 (packaged)	≈ 590 to 700 g (≈ 1,290 to 1,400 g)

## Dimensions

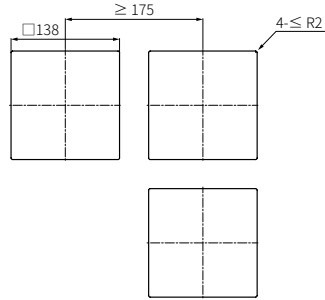
• Unit: mm, For the detailed drawings, follow the Autonics website.



### Bracket

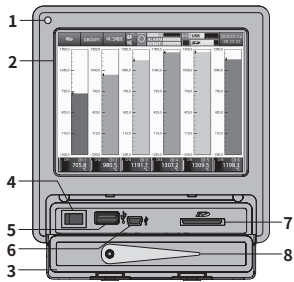


### Panel cut-out



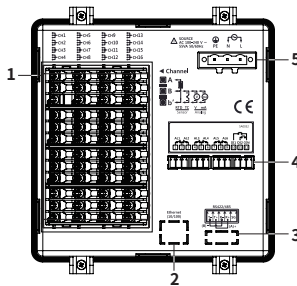
## Unit Descriptions

### Front



- 1. Power indicator**  
Red LED turns ON when the power is supplied.
- 2. Screen**  
Measured value is displayed as trend graph, bar graph, or digital figures.
- 3. Front cover**  
In the cover, there are power switch and, USB Host / Device, and SD card slot.
- 4. Power switch**  
It turns on / off the power.
- 5. USB Host port**  
It is for connecting USB memory. It recognizes up to 32 GB. When using extension cable, cable length should be shorter than 1.5m. Do not connect any USB device except USB memory.
- 6. USB Device port**  
It is for setting parameter.
- 7. SD card slot**  
It is SD card memory slot. It recognizes up to 32 GB.
- 8. Stylus pen**  
It is used for touching the screen.

### Back



- 1. Sensor input terminal**  
It is for connecting universal input.
- 2. Ethernet port**  
It is for connecting Ethernet cable. It communicates Modbus TCP.
- 3. RS422 / 485 port**  
It is for connecting RS422 / 485 for Modbus RTU communication.
- 4. Option input / output port**  
It is for connecting option input / output (digital input (non-contact / contact) and alarm output, power for transmitter)
- 5. Power input terminal**  
It is for connecting the power.