## Wireless logger MD8000 series with monitoring function Transmitter for Ethernet connection model (temperature / humidity sensor model)



Wireless logger MD8000 series with monitoring function (Ethernet. connection model) is system equipment having 3 steps of function. At first, the receiver received data such as temperature, humidity, voltage signal and alarm wireless from dedicated transmitters (up to 60 units) distributed. Secondly, transfers data to an Ethernetconnected computer. Lastly, dedicated application software (sold separately), collects data and monitors various alarm system equipment.

This PS sheet contains explanations for the temperature / humidity sensor model of transmitter for Ethernet connection model (thermistor for temperature sensor and electrostatic capacity type high polymer membrane for humidity sensor). The transmitter can also be used as a relay for communication. Up to 6 relay stages are possible.



MD8 12- 00 Power supply type 1: AC power supply 2 2: Dedicated battery Cable length N: Direct attachment 1: 1m 3: 3m 5: 5m

\* 1 Alkaline AA batteries × 2 (Standard accessories included

2 Dedicated AC adapter: 12 V output (standard included)

3 Dedicated lithium battery (standard included) ... Not a charging type.

f it is damaged due to the dedicated item, please purchase a new item (format SPN) from our

Specifications

Main unit usage environment: Battery, AC power supply specification ..

-10 to 50 ° C

(AC adapter - 0 to 40 ° C)

10 to 80% RH (without condensation)

Dedicated battery specification ... -20 to 60 ° C,

10 to 90% RH (without condensation)

Protective structure: IP 64 (Battery, dedicated battery specification only) Weight: Approx. 130g(battery specification), approximately 160g(AC power

specification)

Approximately 180 g (dedicated battery specification)

(Note) In case of direct sensor attachment Battery, AC adapter,

exclusive use battery not included.

Material: ABS resin

Wireless system: Specified low-power radio ARIB STD T-67

Wireless frequency: 429.2500 to 429.7375 MHz

Transmission output: 10 mW

(Communication distance: indoor outlook approximately 100 m, Outdoor outlook approximately 400 m. However it varies depending on the use environment)

Contact specification: At output ... Load voltage max 30 V DC, load current

Max 70 mA, ON resistance max 35  $\Omega$ 

Input ... Output voltage 3.0 V or less, Input resistance 1 k $\Omega$  or less

Applicable connection cable ... Single wire AWG 22 ~ 16,

Twisted wire AWG 24 to 16

Accessories: Manual instruction 1

Test report 1

Wood screws for wall mounting 2

Alkaline AA battery 2

Dedicated AC adapter (cable length 1.5 m)

Dedicated lithium battery

Replacement sensor: Model MD9203



Power supply

Battery specification

Power supply: Alkaline AA batteries  $\times$  2 or NiMH rechargeable batteries  $\times$  2 Power consumption: Up to about 0.2 W

Battery life: About 11 months

(Only when recording interval is 10 minutes, no relay operation,

recorded data collection communication every 10 days, No monitoring communication, no alarm occurrence, at ambient temperature 25 ° C)

AC power supply specification

Power supply: Dedicated AC adapter (input: 100 to 240 VAC / output: 12 VDC) and backup builtin secondary battery (charged when AC adapter is driven)

Power consumption: Up to about 1.5 W

Backup time: More than 4 days by secondary battery (about 30 hours full charge)

(Only when recording interval is 10 minutes, no relay operation, recorded data collection communication 1 time, no monitoring communication, at ambient temperature 25 ° C) Specific battery specification

Power supply: Dedicated lithium battery  $\times$  1 pack

Power consumption: Up to about 0.2 W

Battery life: About 2 years

(Only when, recording interval is 10 minutes, no relay operation,

Recorded data collection communication every 10 days, no monitoring communication, no alarm occurrence, at ambient temperature 25 ° C)

## ■ Measurement specification

Measurement range

Battery specification, AC power supply specification

Temperature

-10.0 to 50.0 ° C (direct sensor attachment)

-20.0 to 60.0 ° C (cable length: 1 m, 3 m, 5 m)

Humidity 0 to 100% RH

Dedicated battery specification

Temperature

-20.0 to 60.0 ° C

Humidity

0 to 100% RH

Measurement accuracy: Temperature  $\pm$  0.5 ° C  $\pm$  1 digit (when the main body is -5 to 50 ° C)

 $\pm 1.0$  ° C  $\pm 1$  digit (when the main body is not the above)

Humidity  $\pm 3\% \text{ RH} \pm 1 \text{ digit}$ 

(20 to 80% RH, when the main body is 25 ° C.), temperature coefficient:  $\pm$  0.4% RH / ° C.)

(± 10.0 ° C for temperature measurement value and ± 10% off

for humidity measurement value can be set)

Resolution: 0.1 ° C and 1% RH

Response time: Temperature ... Approximately 12 minutes

Humidity ... Approximately 30 seconds

Recording interval: 5, 10, 30 seconds, 1, 5, 10, 15, 30 minutes, 1, 2, 3

The number of recorded data: 16,000 / channel



Display

Display: Reflective LCD

Display content: Measured value (temperature, humidity), clock, recorded / not recorded, recording mode (Endless / one time), radio field strength (4 levels), alarm(ALARM), remaining battery level (4 levels, battery specification), AC drive

(AC power supply specification)

Measurement display update: When the recording interval is  $5\ \mathrm{or}\ 10$  seconds, record every time.

Updated every 30 seconds if it is longer than 30 seconds.

Fixed for 5 seconds for AC power model

Alarm specification

Setting: Set from application software of PC

Type: Upper limit / lower limit / upper-upper limit / lower-lower limit / rise change

rate/ declining change rate / integration

(The change rate is the difference from the previous measurement value.

Integration is the temperature accumulated value from the start of recording and the setting of accumulated alarm)

Judgment: Determine at every data recording timing, send to the receiver at alarm establishment, display ALARM, or transfer to the receiver and clearing of ALARM display by clearing the alarm

Additional function: Alarm monitoring time zone ... Set time zone and day of the week to monitor

Alarm delay ... The alarm is not established until data exceeding the alarm point continues for the specified number of times.

Change rate alarm establishment condition ... Set the number of recorded data not to be alarmed judged from the start of recording (0 to 10 times)

Alarm terminal block: Terminal block of this instrument is assigned to "alarm output" or "trigger input"

(Assignment selection depends on computer application)

Alarm output

Contact output from terminal block at alarm occurrence

Trigger input

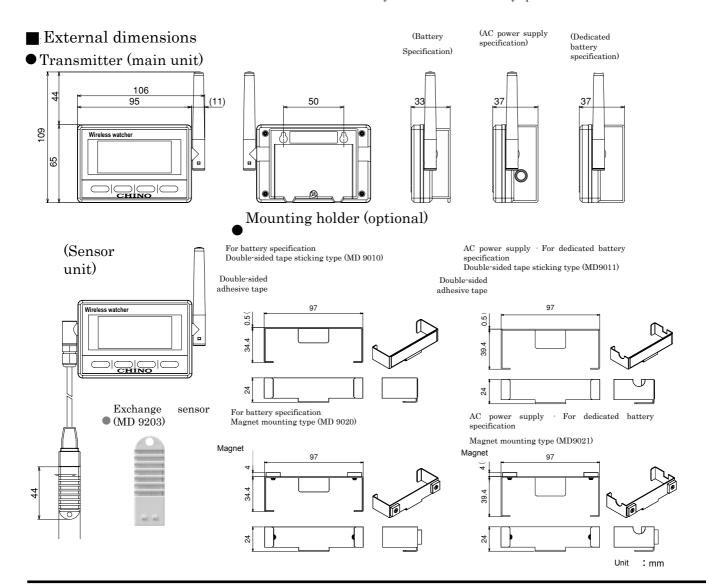
Alarm monitoring only when terminal block conduction (short circuit)

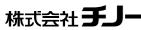
(Note) Alarm terminal block only AC power supply specification Equipment status alarm: Send to receiver when following occurs

- · Battery low level (in case of battery specification)
- · AC power shutdown (AC power supply specification)
- · Measurement value under / Over range
- · Burnout of temperature / humidity sensor

Other functions:

Start / stop measurement: By key operation of this instrument Key lock: Enable / disable key operation of this instrument





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※記載内容は性能改善等により、お断りなく変更することがございますのでご了承下さい。
※本PSシートの記載内容は2015年12月現在のものです。

名100 古紙配合率100% 再生紙を使用しています