Ubiquitous Recorder
KR5000

PS
PERFORMANCE SPECIFICATION
CHINO

KR series is a network-compatible Recorder, capable of recording up to 128 channels of field measurement data through Internet web browser window and easy data transfer by FTP or E-mail without use of any special software.
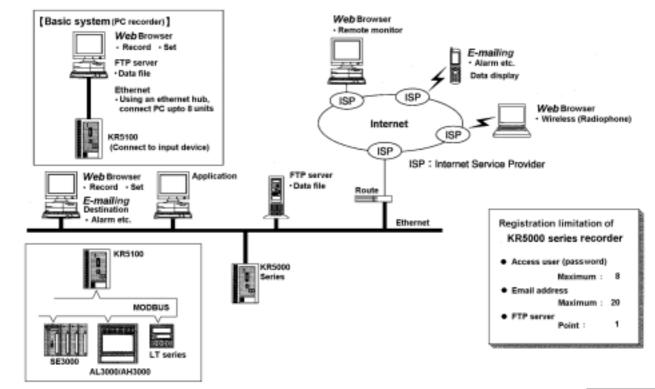
■ FEATURES

- Monitoring screen designed in the html form, So any personal computer can read-out the loaded data without special application software.
- Display by vertical/horizontal real time trend, digital data, bar graph, alarm condition or group display of 8 screens in one.
- Automatically transfer (FTP client) the data file to a server.
- E-mail notification at the time of alarm generating and the abnormalities in apparatus.
- MODBUS instrument, field scanner, recorder and controller are connectable.

■ MODELS

KR 5☐ 00-000

Instrument interface
1: MODBUS
SE3000,
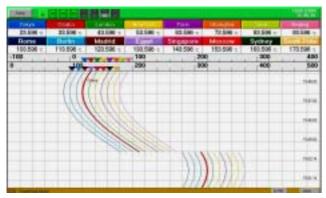AH3000/AL3000,
LT series

■ System configuration

PSE-347

■ Web Display Windows

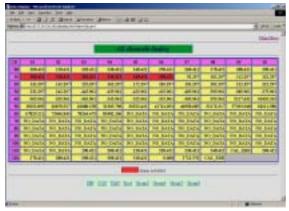### • Real-time trend display window
The window shows trends of data or alarm.

• Window Partition
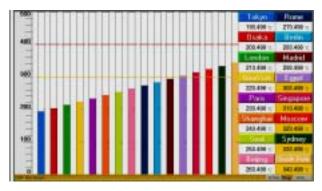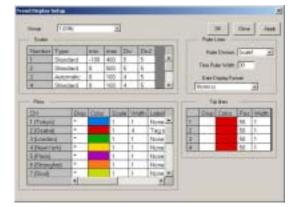Window can be partition to 8 for one group display.

• Over-view window

• User-ID and password setup

• Bar-graph display window

• Trend display setup

• Alarm display window

• E-mail account setup

■ SPECIFICATIONS

● Input function

Input points: Up to 128 points of registered data

Input interval: 1second / All points

Group register: Group name, connected instruments number,
tag name, unit, input operate (moving average,
arithmetic expression)

*16 channels are connectable per one group

*Up to 8 groups can be registered

● Web Display Specifications

Trend display: Real-time or historical trend display

*Selectable from horizontal and vertical scroll.

*Prepare graph window for each registered group.
Manual/auto-scale and logarithmic scale
(Up to 8 scales can be used simultaneously.)

*Input of desired comments message
32 colors are selectable for each group
Historical trend display: specified time section display,
message, alarm-jump/scrollbar operate/readout
stored files, change time-scale, etc.

Bar Graph: Selectable from horizontal and vertical scroll.

*Prepare a graph window for each registered group.

*Color and scale are common to trend display

Data display: Data value display and alarm status (the color is
selectable)

*Prepare a graph window for each registered group.

*Indicating color is common to trend display.

Screen partition display: Screen partition to a maximum of 8.
Input of desired comments message

Overview: Display measuring data, Alarm status.
Renew each 10 seconds.

Information display: Alarm, message, file list, etc.

Setting screen: Ethernet; FTP; E-mail; Users ID;
Input instrument; clock.

● Recording Function

Internal memory: 128MB

Record method: continuous record, start/stop operate, event
record, external trigger, start/stop time.

Recording intervals: more than 1 second

Number of loading file: Select 128 recording points …31 files
Select 64 recording points … 63 files
Select 32 recording points …127 files
Select 16 recording points …255 files

*7824 data per channel can be stored to 1 file.

Data file form: Binary

Alarm memory: 200 events. Stored in CSV file

● Alarm Specifications

Setups: Up to 4 alarms can be set per channel.

Alarm types: Higher limit, lower limit, variation higher limit,
variation lower limit, device-identified alarm,
abnormal data.

Alarm outputs: 2 relay output, or designated channel.

Delay function: Setup of alarm delay of 1 to 3600 second.

● Computation Specifications

Computation types:

Arithmetic operations: Addition, subtraction, multiplication,
division, remainder, power

Comparison operations: Equality, inequality, more, less

Logic operations: AND, OR, XOR, NOT

General functions: Raise fractions, omit fractions,
absolute value, square root, exponent
of e, natural logarithms, common
logarithms

Statistics operation: Sum or average for data and channel

Integration operation: Analog integration, pulse integration

● General Specifications

Rated supply voltage: 100-240VAC,
50/60Hz (free power supply)

Power consumption: 27VA max

Normal Operating condition:

Ambient temperature/humidity range: 0-50°C, 20-80%RH

Supply voltage: 90-264V AC

Supply frequency: 50/60Hz ±2%

Power failure countermeasures:

Setups are backed up by an EEPROM.

Data backups by flash memory.

A lithium battery backs up the clock and data RAM for 3
years or more (assuming 8 hours of operation per day).

Mounting: DIN rail mounting

Weight: Approx. 850g

■ COMMUNICATION FUNCTIONS

● Network

Communication type: Ethernet (10BASE-T or 100BASE-TX)

FTP client: Auto transfer of recording data files to FTP server

* Registration: Server's IP address, password,
data path name.

Registered data transfer:

Recorded data file can be transferred by user's register.

Web-sever: Conform to HTTP1.0

Display the alarm, information of maintenance by
browser software (Internet Explorer 5.0 or later,
Net Scape6.0 or later, Opera 7 or later)

* Registration: User's ID, password, mail account

E-mail: Email will be sent to maximum 20 addresses
when alarm occurred, or instrument on, or at
specified time.
The message text in E-mail will be 10-template.

Sent at an alarm output, setup and specified time of day

Serial communication: RS-232C (for support)
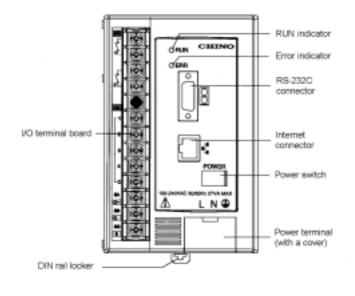*9600bps, 8bit, stop bit 1, no parity
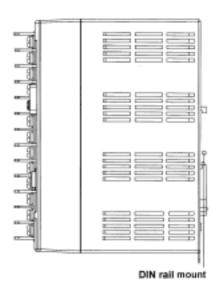
● Instrument interface

Instrument interface: MODBUS

Communication: RS-485 (connectable up to 31 instruments)

Read out: Measuring data, alarm

Transmission: Setting data (Limited in connected instruments)

Connectable instruments:

SE3000,
AL3000/AH3000 series,
LT230, LT350, LT370, LT450, LT470
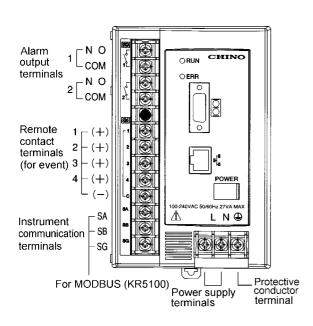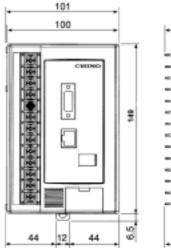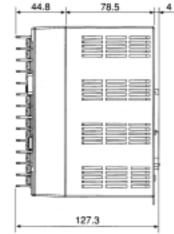
■ NAME OF PARTS

RUN indicator
Error indicator
RS-232C connector
I/O terminal board
Internet connector
Power switch
Power terminal (with a cover)
DIN rail locker

DIN rail mount

■ TERMINAL BOAD

Alarm output terminals
1 [N O / COM]
2 [N O / COM]

Remote contact terminals (for event)
1 (+)
2 (+)
3 (+)
4 (+)
(−)

Instrument communication terminals
SA
SB
SG

For MODBUS (KR5100)
Power supply terminals
Protective conductor terminal

100-240VAC 50/60Hz 27VA MAX   L N ⏚

■ DIMENSIONS

101
100
44.8   78.5   4
149
44   12   44
6.5
127.3

Unit: mm