Ubiquitous Recorder KR5000

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.

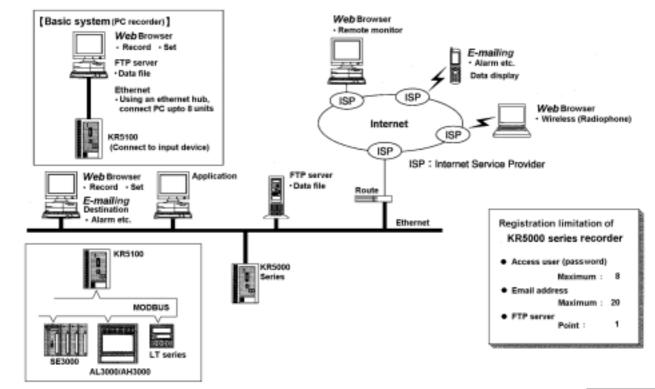
FEATURES

- 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

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

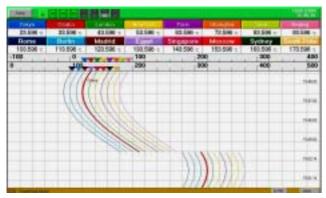




System configuration

Web Display Windows

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

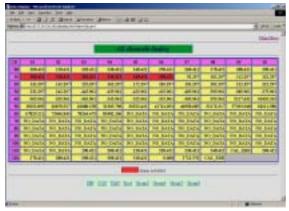


• Window Partition

Window can be partition to 8 for one group display.



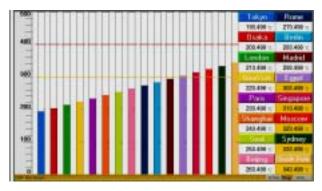
Over-view window



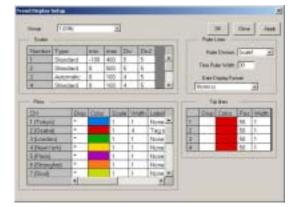
User-ID and password setup

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• Bar-graph display window



• Trend display setup



• Alarm display window

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• E-mail account setup

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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 operation	ons: 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
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Statistics operation: Sum or average for data and channel Integration operation: Analog integration, pulse integration

General Specifications

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Rated supply voltage:	100-240VAC,
	50/60Hz (free power supply)
Power consumption:	27VA max
Normal Operating condition	ion:
Ambient temperature	e/humidity range: 0-50°C, 20-80%RH
Supply voltage:	90-264V AC
Supply frequency:	50/60Hz ±2%
Power failure counterme	asures:
Setups are backed u	ιp by an EEPROM.
Data backups by flas	sh memory.
A lithium battery bac	ks up the clock and data RAM for 3
years or more (assu	ming 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

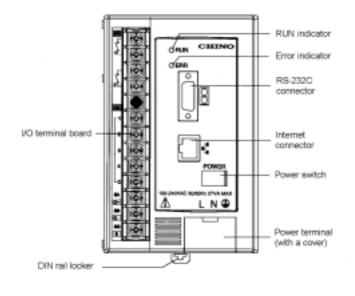
Instrument interface

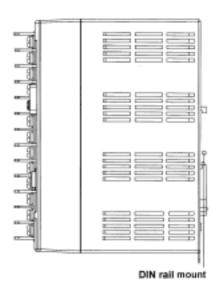
Instrument interface	: MODBUS
Communication:	RS-485 (connectable up to 31 instruments)
Read out:	Measuring data, alarm
Transmission:	Setting data (Limited in connected instruments)
Connectable instrum	nents:
	SE3000,

AL3000/AH3000 series, LT230, LT350, LT370, LT450, LT470

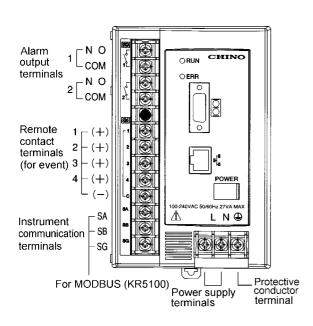


■ NAME OF PARTS

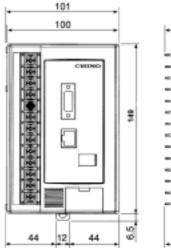


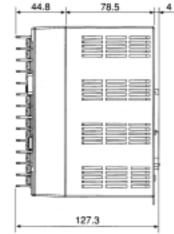


TERMINAL BOAD



■ DIMENSIONS





Unit: mm

Specifications subject to change without notice. Printed in Japan (I) 2004. 11

