SR 10000

Industrial Recorders

The SR10000 is a small compact industrial recorder with a recording width of 100 mm. The model family consists of 1, 2, 3, 4 pen and a 6 dot model. The SR10000 offers outstanding clear display of field data and reliability of recording data.

Bulletin BU04P03B01-01E

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Includes a Full Set of Basic R

SR10000 is a new compact recorder, including basic recorder functions such as measurement, recording, and display offered by leading-edge technology. Operating efficiency is increased through easy-to-read data and ease of operation.

Large (10 x 18 mm) LED display

Universal inputs

Robust, splash-proof design (IP54)

Network compatible

Actual Size: 144x144mm

Easy to Read and Easy to Operate Print and Record Functions

The SR10000 has variety functions such as pen offset compensation which compensates for the pen offset (phase difference) along the time axis, printing functions (message, alarm, and periodic printout), zone recording, and partial expanded recording.
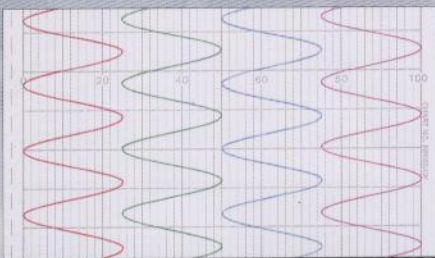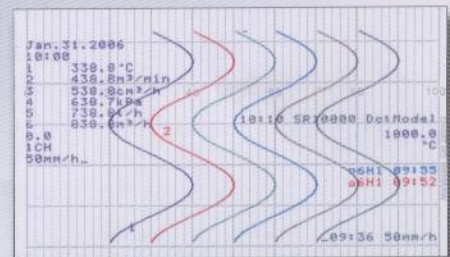
Zone recording
Lets you set a distinct analog recording zone for each channel.
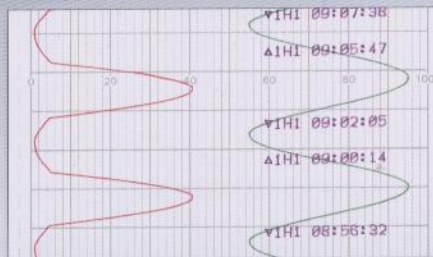
Partial expanded recording
Lets you expand the section of recording range to record detail.

Message printout
Lets you write the pre-registered messages.

Introducing the 4 Pen Model

Provides 1, 2, 3, 4 pen model and 6 dot model.

Large, Vivid LED Display

SR10000 displays data for easy viewing on a large display (10x18mm/segment), allowing the on-site operators to immediately check the operational status of equipment.

Channel No. display

Alarm type display

RCD **ALM**

Recording in progress

Alarm indicator

5-digit measured value display

Easy, Interactive Configuration

- Parameters are easily configured using the SR10000's display keys. For example, when setting the input range, the channel number, range type, and span are configured in order using the Menu key, arrow keys ($\uparrow \rightarrow \downarrow$), and the ($\downarrow$) key.
- Parameter configuration using PC software
  Parameter configuration, saving of settings, and downloading of settings can be performed on a PC.

Menu key   Arrow key   ENT key

## The high reliability demanded for industrial recorders

The SR10000's popularity is a testimony to its high reliability, made possible with the latest technology.
- Fully contact-less technology
- Actuators reduced in size through high precision manufacturing
- High degree of integration using custom ICs
- Dust-and splash proof front door (conforms to IP 54)

C E

Convenient Components Offer Ease of Operation

- Provides an easy-to-use disposable felt-pen cartridge (for pen model) and ribbon cassette (for dot model).
- The chart cassette is equipped with a chart ejection function. You can write memos on the chart and check the historical trend during recording.
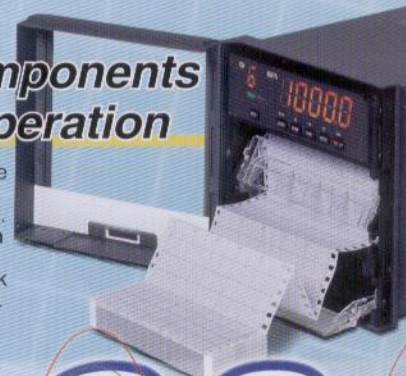
Industrial Recorders SR10000

Specifications

See the general specifications (GS04P03B01-01E) for more details.

Input section
Measurement points: 1-4 pens, 6 dots
Input type:
  Universal input
  DCV : 20 mV, 60 mV, 200 mV, 2 V, 6 V, 20 V, 50 V
  TC : R, S, B, K, E, J, T, N, W, L, U, W3re/W25re
  RTD : Pt100
  DI : Voltage input (TTL), contact input
  DCA : Direct current input (with external shunt register)
Measurement intervals:
  Pen models 125 ms
  Dot models; 1 s/6 points, 2.5 s/6 points
Computation: Differential computation, linear scaling, square root, bias addition

Recording section
Effective recording width: 100 mm
Recording period:
  Pen model : Continuous for each channel
  Dot model : 6 ch/10sec
             (the shortest recording period)

Display section
Display method: LED array display (2 small and 5 large digits, each comprising 7 LED segments)
Display types : Channel No., alarm type, measured value, date/time etc.
Status display: Recording in progress, shared alarm display

Alarm function
Number of levels : 4 levels per channel
Type of alarm   : Higher/lower limit, differential higher/lower limit

Optional functions
Alarm output relay (2, 4, 6 points), remote control, expansion inputs, AC/DC24V power supply, calibration correction communication interface (RS-422A/485 or Ethernet), and others.

Construction
Front panel : Water- and dust-proof (based on IEC529-IP54)
Dimensions : 144 (W) x 144 (H) x 233 (D) mm
Weight   : 2.1 kg-2.5 kg

Power supply
Rated voltage   : 100 to 240 VAC, automatically selected
Rated frequency   : 50/60 Hz
Power consumption : 18 VA (In balance), maximum 40 VA

Model Codes

Model code	Suffix code	Option code	Description	
SR10001			1 pen recorder	
SR10002			2 pen recorder	
SR10003			3 pen recorder	
SR10004			4 pen recorder	
SR10006			6 dot recorder	
	-2		English	deg F, DST (summer/winter time)
Option		/A1	Alarm output relay (2 contact)*1	Enables detection of abnormal value using the following alarm type: high/low limit, differential high/low limit
		/A2	Alarm output relay (4 contact)*1	
		/A3	Alarm output relay (6 contact)*1	
		/CC1	Calibration correction	Corrects Input value with linearization. Number of setting points: 2-16 points
		/C3	RS-422/485 Communication interface*2	Supports Modbus protocol (RTU SLAVE)
		/C7	Ethernet communication interface*2	10Base-T
		/D6	Green display	Green color for LED display
		/N1	Cu10, Cu25 input	Enables Cu10 (6 types such as GE, L&N and more) and Cu25 input in addition to the standard inputs.
		/N3	Expansion inputs	Enables 14 types of input such as Pt50, PR40-20, PLATINEL inputs in addition to the standard input types.
		/P1	24V DC/AC power supply	Operating power supply voltage range: 21.6-26.4VDC
		/R1	Remote control	The following operations can be performed using contact input. Record start/stop, switching chart speed, message print, manual print

*1: /A1, /A2, /A3 cannot be specified together.
*2: /C3, /C7 cannot be specified together.

Application Software

Model	Description	OS	
RXA10-01	RXA10 configuration software	Windows 2000/XP	Enables parameter setting, saving/loading of settings.
RXA10-02	RXA10 configuration software (with interface unit)	Windows 2000/XP	

Note Support for RXA10 configuration software is phased in.
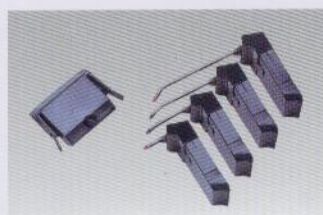
Standard Accessories

Name		1 pen	2 pen	3 pen	4 pen	6 dot
Z-fold chart		1	1	1	1	1
6 color ribbon cassette		-	-	-	-	1
Disposable felt pen cartridge	Red	1	1	1	1	-
	Green	-	1	1	1	-
	Blue	-	-	1	1	-
	Violet	-	-	-	1	-
Plotter pen	Purple	1	1	1	1	-
Mounting bracket		2	2	2	2	2
User's Manual (CD-ROM)		1	1	1	1	1
User's Manual (Operation Guide)		1	1	1	1	1
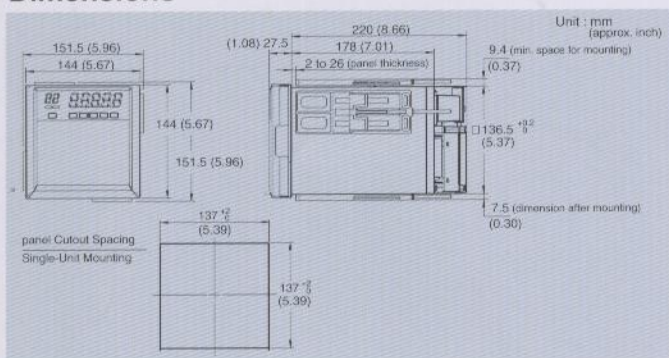
Spare Parts/Optional Accessories

Name		Model code (part number)	Specification
Z-fold chart		B9565AW	10 (Sales unit)
6 color ribbon cassette		B9901AX	1 (Sales unit)
Disposable felt pen cartridge	Red	B9902AM	1 (Sales unit, 3 pieces/unit)
	Green	B9902AN	1 (Sales unit, 3 pieces/unit)
	Blue	B9902AP	1 (Sales unit, 3 pieces/unit)
	Violet	B9902AQ	1 (Sales unit, 3 pieces/unit)
Plotter pen	Purple	B9902AR	1 (Sales unit, 3 pieces/unit)
Mounting bracket		B9900BX	2 (Sales unit)
Shunt resister		4159 20	250 Ω ±0.1%
		4159 21	100 Ω ±0.1%
		4159 22	10 Ω ±0.1%

Dimensions

Unit : mm (approx. inch)

151.5 (5.96)
144 (5.67)
144 (5.67)
151.5 (5.96)
(1.08) 27.5
220 (8.66)
178 (7.01)
2 to 26 (panel thickness)
9.4 (min. space for mounting) (0.37)
□ 136.5 +2/0 (5.37)
7.5 (dimension after mounting) (0.30)

panel Cutout Spacing
Single-Unit Mounting
137 +2/0 (5.39)
137 +2/0 (5.39)

Pen Plotter pen
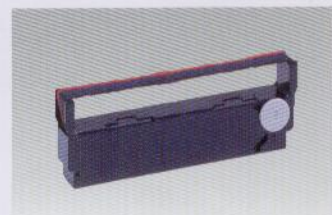
Ribbon cassette

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NOTICE
● Before operating the product, read the instruction manual thoroughly for proper and safe operation.
● If this product is for use with a system requiring safeguards that directly involve personnel safety, please contact the Yokogawa sales offices.

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