

Hybrid Recorder



HR-700 Series



A smaller, lighter recorder with RS-232C standard.

Shinko
North America Ltd.

www.mod-tronic.com

Toll Free 1 - 800 794-5883

Standard Features

• True Hybrid Design

Units offer fully programmable features including: input types, chart speed, data recording session and intervals, scaling, alarm points, etc.

• True Multi-Input

Units feature true multi-input capabilities: 13 thermocouple types, 1 RTD type, 1 current inputs, and 7 voltage inputs.

• Computer Communications

All units feature standard RS-232C communication interface.

• Large/Full Function LED Display

All units feature full function digital display of channel number, PV value, and recording and alarm status, etc. Bright red 18mm display.

• 1, 2, And 6 Point Versions Available

Units are available in either 1 or 2 channel, or 6 point recording versions.

• Designed For Harsh Environments

Units rated to IP65, and constructed of flame resistant resin.

• Compact Design

Unit measures only 150mm in depth and weigh less than 1.5kg. Chart width 100mm.

• Safety Approvals

UL, CSA and CE Safety Approvals.

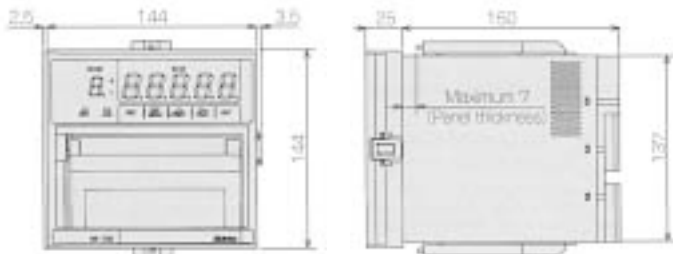
• Warranty

All units manufactured to strict ISO standards and offer full 2 year manufacturers warranty.

• Low Cost

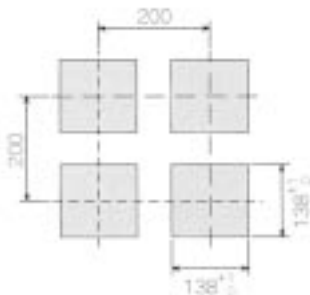
Most advanced price/performance package available.

External Dimensions

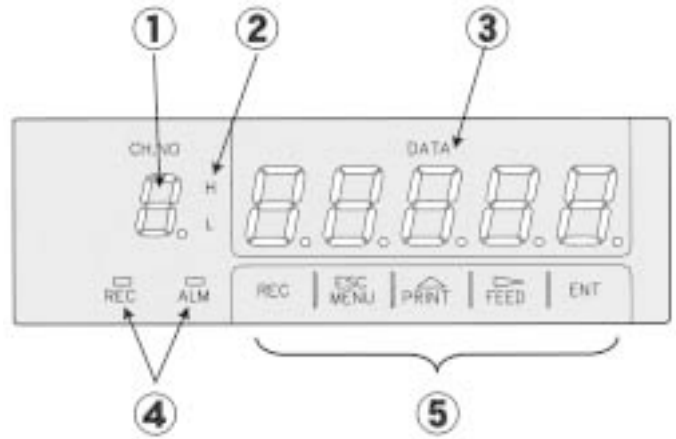


Allowable inclination angle, 0 to 30° or less.

Panel Cutout



Display And Operation Keys



1: Channel Number Indicator

Orange LED indicates Channel number 1 to 6.

2: Alarm Indicator

Red LED indicates the type of the alarm, [H] is lit when the alarm is High, and [L] is lit when the alarm is Low. Neither of them is lit when there is no alarm.

3: Data Indicator

Indicates the process variable, time, setting value and setting item by orange indicator.

4: Status Indicators

The [REC] (orange) is lit when recording.

The [ALM] (red) is lit when the alarm is being activated.

5: Operation Keys

Use these keys for setting and other operations.

**High Performance Temperature
& Recording Instrumentation**
...at the lowest prices anywhere!

Input Range Table

	Input Type	Scale	
Thermocouple	B	0 to 1820°C	32.0 to 3308°F
	R	0 to 1760°C	32.0 to 3200°F
	S	0 to 1760°C	32.0 to 3200°F
	K	-200 to 1370°C	-328 to 2498°F
	E	-200 to 800°C	-328 to 1472°F
	J	-200 to 1100°C	-328 to 2012°F
	T	-200 to 400°C	-328 to 752°F
	Au-Fe	1.0 to 300K	-
	N	0 to 1300°C	32 to 2372°F
	PR40-20	0 to 1880°C	32 to 3416°F
	PL-II	0 to 1390°C	32 to 2534°F
	U	-200 to 400°C	-328 to 752°F
L	-200 to 900°C	-328 to 1652°F	
RTD	Pt100	-200 to 650°C	-328 to 1202°F
DC Voltage, Current	-10 to 10m V 0 to 20m V 0 to 50m V -200 to 200m V -1 to 1V 0 to 5V -10 to 10V 4 to 20mA	Scaling is possible within the range -32767 to 32767. Decimal point may be placed where required.	

• For DC current input a shunt resistor (250Ω) is required.

Options

Communication function [C5]	Communicating line: RS-485, Data transfer rate: 1200 / 2400 / 4800 / 9600 / 19200bps
DI function [RE1] [RE6]	Settable at 3 points (Maximum) Chart feed Start / Stop :Relay ON :Start Relay OFF :Stop Changing chart speed :Changes 1st with tuning to ON and 2nd with OFF Comment print : Prints comments with tuning to ON (Up to 16 characters per line) Log print : Prints with tuning to ON Date and time print : Prints date and time with tuning to ON
Empty paper tray detection function [FL]	Detects the paper-empty, stops recording, and performs the alarm output. (When adding this option, [LH3] or [LH6] needs to be specified.
Alarm output function [LH3] [LH6]	Output number • Pen writing type, 3 points (Built-in option, a contact) • Dot printing type, 6 points (Built-in option, a contact) Contact capacity 250V AC Maximum 3A (Resistive load) 30V DC Maximum 3A (Resistive load) 125V DC Maximum 0.5A (Resistive load)



Accessories

SPARE PARTS	PART NUMBER
Chart paper (20 charts per box)	H-10100
Cartridge pen (Red)	WPSR196A000001A
Cartridge pen (Blue)	WPSR196A000002A
Ribbon cassette (HR706)	WPSR188A000001A
Ribbon cassette (HR701 & 702)	HPSR001H002
Instruction manual (HR701 & 702)	HR72E3
Instruction Manual (HR706)	HR71E3

Shinko is an
ISO 9001
facility



Shinko
North America Ltd.

Terminal Wiring



1. Alarm output terminals (Option)
2. Input terminals
3. Power supply terminals
4. RS-485 Communication terminals (Option)
5. DI Function terminals (Option)
6. RS-232C Communication terminals

Model Number Configuration

HR-70 /M	
NUMBER OF INPUTS	CODE
1-Point (pen type)	1
2-Point (pen type)	2
6-Point (dotting type)	6
INPUT	CODE
Multi-range T/C, RTD, mA, VDC	M
OPTIONS	CODE
Communications (RS-485)	C5
DI function (pen type)	RE1
DI function (dot type)	RE6
Paper empty detection	FL
Alarm output function (pen type)	LH3
Alarm output function (dot type)	LH6