AH4000 series is a hybrid recorder which employs bright and clear, easy to view LCD display.
Measuring value display is prepared as 1 point display, multi-points simultaneous display and digital display + bar graph display. Various measuring and recording settings can be easily done by front key switch and confirmed by LCD digital display.
Equipped with SD card (sold separately) and it can record data, read and write setting value

Corresponds to SD card Equipped with SD card (sold separately) and it can record data, read and write setting value.
Full multi range Equipped with DC voltage 10 kinds, T/C 36 kinds, RTD 12 kinds, in total 58 kinds. Easily set the range per channels.
Easy data management by communication interface Provided with USB port and connect with PC directly. RS232C, RS422A, RS485 and Ethernet communication interface is optionally prepared. When Ethernet is selected, settings from the web and E-mail alarm notification are added.
Package Software By Data acquisition software, the use of application expands from recording/management to information processing. Data analysis software can replay display, wave process, editing and trend display. Parameter setting software can manage the setting information on PC.
Standard alarm display/ Printing function Set 4 types of alarm per each input points. When alarm occurs, status display "ALM" flashes and measuring value flashes at LCD operation screen.
Chart end detection function available Can set the alarm operation when chart end is detected.
Various programming function Process the measured data by programming setting and displayed/recorded data of each channels are shown as programmed result data.

INPUT SPECIFICATIONS	
Measuring points	6, 12, 24
	DC voltage: ±13.8mV, ±27.6mV, ±69.0mV, ±200mV, ±500mV, ±2V,±5V, ±10V, ±50V, ±50V DC current: Max 50mA by external shunt resistor (100Ω, 250Ω) (sold separately) Thermocouples: K, E, J, T, R, S, B, N, U, L, W-WRe26, WRe5-WRe26, PtRh40-PtRh20, NiMo-Ni, CR-AuFe, Platinel, Au/Pt Resistance thermometers: Pt100, old Pt100, JPt100, Pt50, Pt-Co
Accuracy rating	
Measuring interval	1 second/6 points, 2 seconds/12 points, 2 seconds/24 points
Input resolution	About 1/40,000 or better (converted to reference range)
Reference junction compensation accuracy	At ambient temperature:23℃±10℃ K, E, J, T, N Platinel---±0.5℃ or EMF 20μV, whichever greater Other than above---±1.0℃ or EMF 40μV, whichever greater
Burnout	Burnout detection function for thermocouple input and RTD input. Upper burnout, lower burnout or burnout disabled is selectable for each input.
Maximum common mode voltage	30V AC/60V DC
Common mode rejection ratio	130dB or more (50/60Hz)
Normal mode rejection ratio	50dB or more (50/60Hz)
Terminal board	Removable when wiring

DISPLAY SPECIFICATIONS	
Analog display	LCD bar graph 180mm
Digital display	Monographic type LCD (Backlight AUTO / Always ON settable) Dots : 264 x 48 dots Display area : 184 x 22mm
Display item	All channels simultaneous display, year/month/day, hour/minute, alarm activate channel, chart speed display of measuring value.
Status display	REC, CARD, ALM
ALARM DISPLAY	
Alarm display	Status display "ALM" flash, measuring value flash at operation screen
Alarm types	Absolute alarm, differential alarm, rate-ofchange alarm, FAIL, calendar timer, chart end
Alarm settings	Individual settings, Max 4 levels/channel
Alarm output	Mechanical relay 2, 6, 12, 24 points ('a' contact) Mechanical relay 4, 8, 16 points (‘c’ contact)
STANDARDS (CONFORMITY PENDING)	
CE marking	EN61326-1 EN61010-1 *Under EMC test condition, variation in indication value is ±20% or ±2mV at maximum, whichever is larger.
UL	UL61010-1 2nd edition
CSA (C-UL)	CAN/CSA C22.2 No.61010-1-04
Protection	IEC 60529 IP54
RECORDING SPECIFICATIONS	
Dotting interval	5 seconds/point, 2.5 seconds/point Interlock to chart speed
Recording method	Wire-dot type 6-color ribbon
Record/Printed color	
Chart paper	Fan-fold type Total width 200mm, total length 20m, effective chart width 180mm
Chart speed	1 to 1500mm / h, in 1mm/h increments (12.5mm / h can be set exceptionally)
Periodic data printing	Digital printing is added to trace printing at month / day, time, channel no., data, unit Interval (hour/time) arbitrary setting
Data printing	When required, interrupt trace printing and digital print time and measuring value
Alarm printing	Alarm activated --- Time, channel no., alarm type and level Alarm reset --- Time, channel no., alarm level Memory capacity --- Max. 48 data
List printing	When required, interrupt trace printing and print date, chart speed and setting information of each channel
Message printing	Print when required Up to 15 characters/message, register up to 20 characters
ON/OFF of display and recording	Select ON / OFF of display per each channel, trace recording to chart, digital recording to chart, recording to SD card
Subtract printing	Record difference between reference channel and measuring value or between reference value (set value) and measuring value
Zone printing	2 / 3 / 4 divisions
Compressed/Expanded printing	Range limit is made non-linear and specific chart recording lower/upper limit is shrunk or expanded
Automatic range shift printing	Recording range is shifted automatically to another set range when measured value exceeds the current range. Overlap function available
Skip function	No display or printing of channels of which ranges are not set
GENERAL SPECIFICATIONS	
Rated power voltage	100 to 240VAC, 50/60Hz
Maximum power consumption	Max 65VA 100V AC balanced: 22VA 240V AC balanced: 31VA
Normal operation condition	Ambient temperature range: 0 to 50ºC (20 to 65%) Ambient humidity range: 20 to 80%RH (5 to 40ºC) Power voltage:90 to 264V AC Power frequency:50/60Hz ±2% Attitude: forward tilting 0º, backward tilting 0 to 30º, left/right 0 to 10º
Case material	Door --- Aluminum die-casting Front panel --- Glass Case --- Cold-rolled steel plate

Case color	Door--- Black (equivalent of Munsell N3.0) Glass--- Clear and colorless Case --- Gray (equivalent of Munsell N7.0)
Mounting	Panel mounting
Weight	About 7.6kg
Terminal screw	Power terminal, Protective conductor terminal --- M4.0 Measuring input terminal, alarm output terminal Remote contact terminal --- M3.5 Communication terminal --- M3.0
OPTIONS	
Remote contact	By external relay contact signal (digital contact: short or open), you can select chart speed or data printing Input points: 5 points, 10 points, 20 points Input signal: Digital contact signal or open collector signal Exterior output: 5V DC/2mA Function: 1. Record start/stop 2. Chart speed 3-speed switch 3. Data printing 4. List printing 5. Message printing 6. Operation record (Record ON/OFF condition to the designate location by bar line) 7. Integration/F value reset 8. Memory card (record start/stop) 9. Alarm output rest 10.Time correction
Alarm output	Mechanical relay ('a' contact) 2 points, 6 points, 12 points, 24 points Max. load 100 to 240VAC 0.2A 30V DC 0.2A Min. load 5V DC 10mA Mechanical relay ('c' contact) 4 points, 8 points, 16 points Max. load 100 to 240VAC 0.2A 30V DC 0.2A Min. load 5V DC 10mA
Communication interface	RS232C, RS422A, RS485, Ethernet