



UNIVERSAL Paperless Recorder

— Max. 12 Channels, 144x144mm —

Model No.: MPR4200



General Specifications

GS 18A16D01-01EN

PAPERLESS RECORDER UNIVERSAL MPR4200

Overview

MPR4200 is universal color paperless recorder, max 12 channels, high accuracy, universal use, easy operation, to be aimed to display, measurement the processes parameters such as temperature, humidity, pressure, flow, vibration etc in various industry application.

Feature

- High accuracy: $\pm(0.2\%FS + 1)$ digit, 5.6" TFT LCD display
- Programmable universal input: T.C., RTD, mA, VDC
- Input channels no.: 1, 2, 3, 4, 5, 6....12 channels
- Built in thermocouple automatic cold junction compensation
- Output: relay, 24VDC auxiliary power supply
- RS485, Ethernet Communication, standard MODBUS-RTU protocol configurable with HMI, SCADA, OPC serve etc
- Flow totalize with temperature, pressure compensation
- Match Function: +, -, x, /, average, max, mini
- Various curve, barograph, digit for different type display
- Strong PC software to display data in digital curve, Print and export to excel for further analysis
- Wide power supply: 100-240VAC



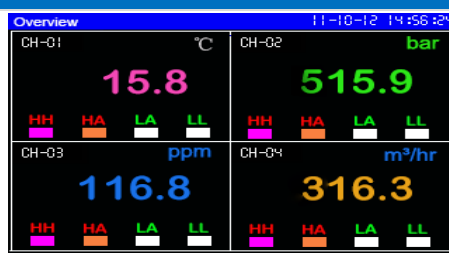
MPR4200

Universal Color Paperless Recorder
144X144X73mm, Max.12 channels

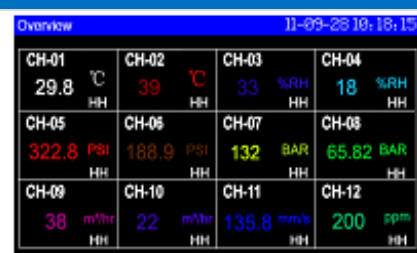
Memory Flash Data Saving, Various Screen Display, Easy operation



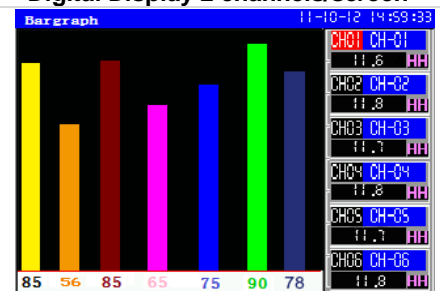
Digital Display 2 channels/screen



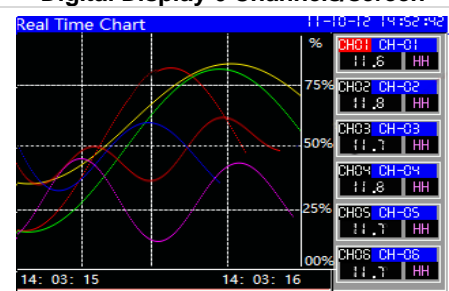
Digital Display 6 Channels/screen



Digital Display 16 Channels/screen



Digital & Barograph Display



Digital & Curve Display



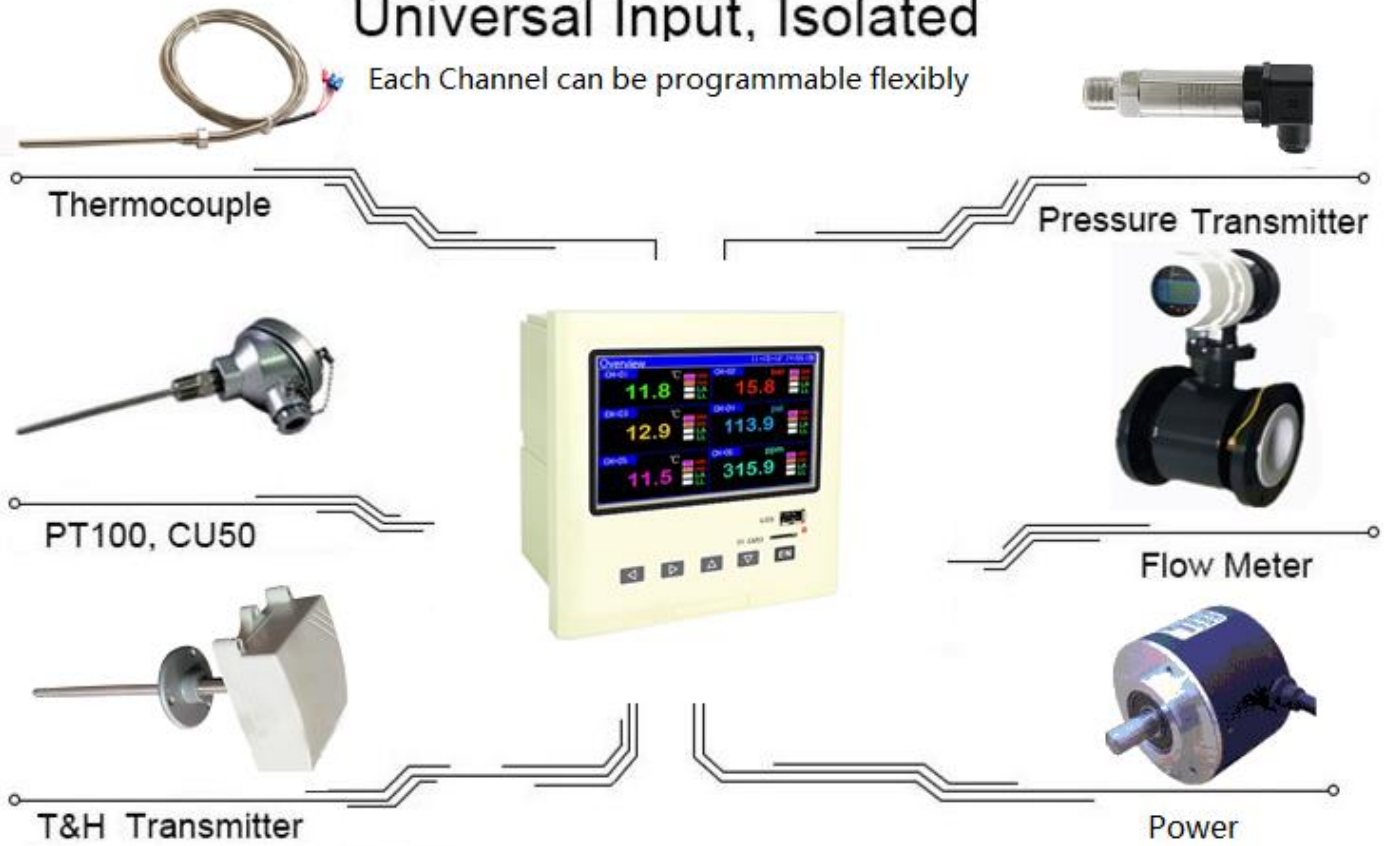
Digital & Circular Chart Display

Memory Flash Drive Data Saving

Provides flexibility and variety in the handling of record data

Universal Input, Isolated

Each Channel can be programmable flexibly



USB Pen Driver for Data Transfer

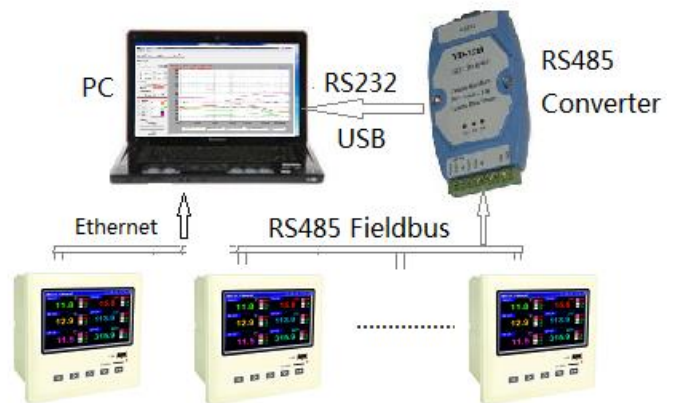
Configuration with SCADA, PLC, HMI, OP sever

USB Pen Driver for Data Transfer



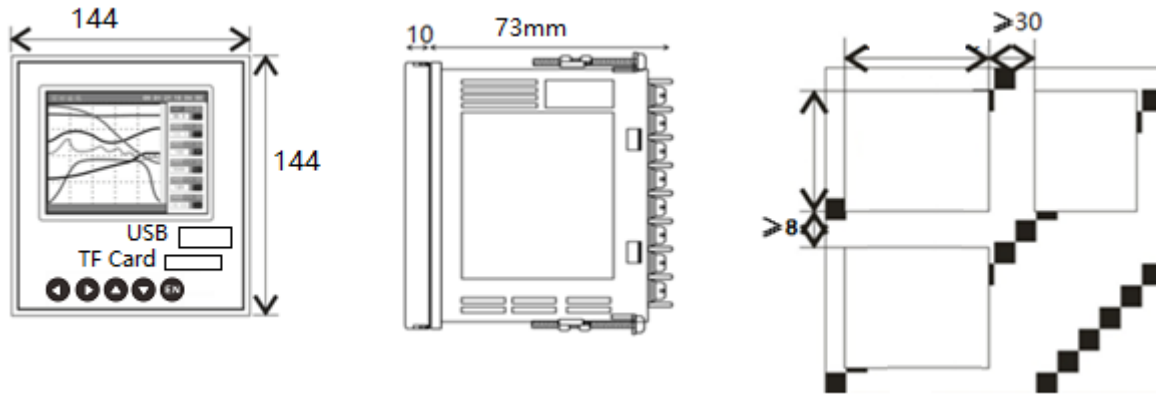
Free 8GB USB pen driver and PC software for data transferring to PC, plug and play, easy to operation, data transferred automatically within some minutes when u need to transfer data and insert pen driver

Real Time Reading and Monitoring

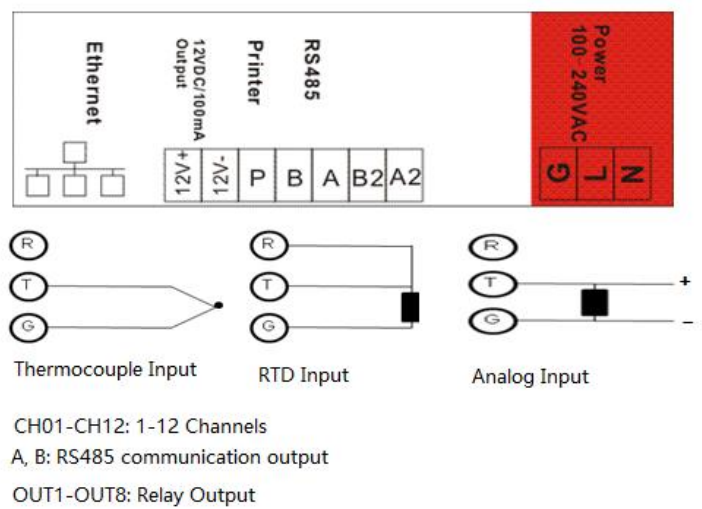
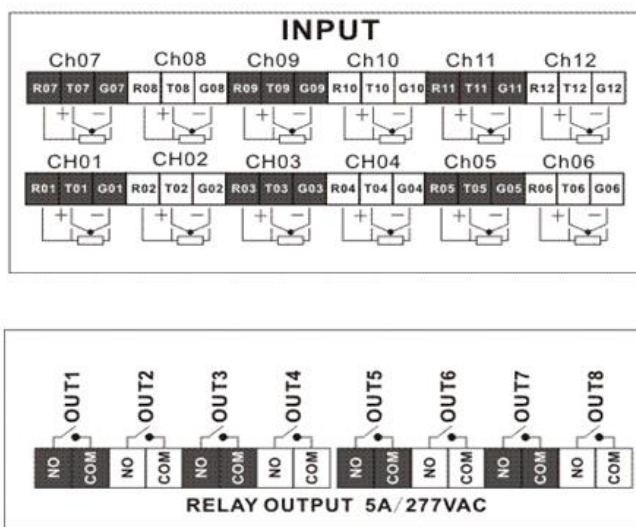


Standard RS485 MODBUS-RTU protocol, configurable with SCADA, DCS, PLC, HMI, OPC server for real time reading and monitoring in control room remotely, Baud rate: 9600 default,4800,19200, RS485 is reading and writing functions

Dimension (mm)

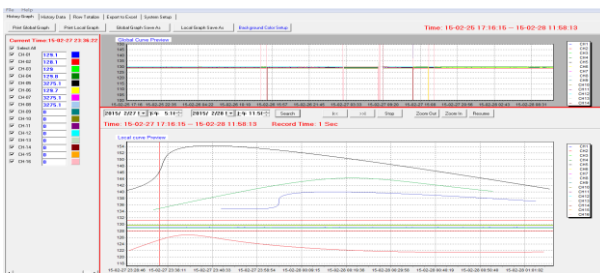


Diagram



Note: When 4-20ma input, please connect 50ohm resistor in parallel connection in input terminals
 When 0-10ma input, please connect 500ohm resistor in parallel connection in input terminals

PC Software

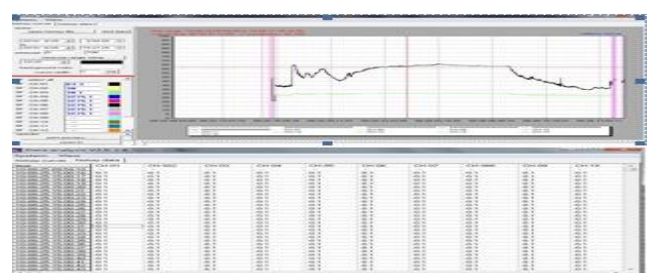


PC Software for USB Data Transferring, free when ex-work
Used for history data checking and further analysis

- . History Data will be displayed in digit and trend
- . History Data can be exporting the data as Excel for further analysis
- . History Data can be printed in the curve by printer directly
- . Flow Totalizer data display in shift, weekly, monthly

Suitable for PC Version: Window 2000/XP, VISTA, Win7, 8, 10

Installation: Please copy our software in your PC directly



DCS Software for RS485 Communication, option

Used for real time monitoring&reading while data memory

- . Data in will be displayed in digit and curve
- . History Data can be exporting the data as Excel for further analysis
- . History Data can be printed in the curve by printer directly

Suitable for PC Version: Window 2000/XP, VISTA, Win7, 8, 10

Installation: Please copy our software to your PC directly

■ Specification

Input		Input			
Input No.	1, 2,3, 4,5,6,7,8,9,10,11,12	Input Type	Measured Range	Input Independence	
Input type	Thermocouple, RTD, mA, VDC, mV	RTD	Pt100	-200 to 600°C	>20MΩ
Frequency input	0-5KHZ, 1 Channel		CU50	-50 to150°C	>20MΩ
Isolation	photoelectric isolation	T.C	CU100	-50 to150°C	>20MΩ
Accuracy	± (0.2%FS +1) digital		K	-50 to 1300°C	>20MΩ
Resolution	0.1°C when temperature input		J	0 to 1000°C	>20MΩ
Sample time	1 second per 8 channels		T	-200 to 350°C	>20MΩ
Decimal No.	0-4 programmable; 1 when temperature		E	0 to 800°C	>20MΩ
T.C. cold compensation	Built- in auto. Compensation	R	-50 to 1700°C	> 20MΩ	
Compensation Tolerance	Max.±1°C	S	-50 to 1700°C	> 20MΩ	
Channel-GND Isolation	1000VAC	B	300 to 1800°C	>20MΩ	
Channels 'Isolation	400VAC	N	0 to 1300°C	>20MΩ	
Temperature shift	50PPM	Analog	4-20mA	-20000 to 20000	250 Ω
CMR Ratio	85-110dB		0-10mA	-20000 to 20000	500Ω
T.C. wire resistor	Less than 1000Ω		0-5VDC	-20000 to 20000	500KΩ
RTD wire resistor	max1000Ω per wire, should same each wire		1-5VDC	-20000 to 20000	500KΩ
Inner CPU	32bits ARM CPU, high performance	mV	0-60mV	-20000 to 20000	>20MΩ
Hardware watchdog	CPU inner integration for long-term stability		0-100mV	-20000 to 20000	>20MΩ
Memory		Display			
Memory Capacity	45days x Record Interval Time/CH numbers	LCD Size	5", color TFT LCD		
Record interval time	1-3600seconds, programmable by key	LCD Resolution	320x240 TFT color LCD		
CH Numbers	1,2,3,4,5,6...12, ordered total channel 'no.s	Display interval time	1-3600 seconds, set flexibly		
Memory type	NOR Flash memory	Data Display Type	Digit, curve, barograph, chart;		
Data transfer Media	8GB,16GB USB pen driver, plug and play	Background lifespan	50,000hours		
Transferred data file	8MB, all data in recorder transferred	Screensaver	0-30,000second, set flexibly		
Data File Name	Year/month/Day/Address.dat: 19031801.dat	Engineer unit	°C, %, psi,bar,m3/hr, ppm.....programmable		
Full capacity memory	earliest data replaced by newest data	Resolution	32 Bit AD inner, final resolution:16 bit		
Data Format	Binary format or cannot read or write	Display	5 digits; Flow totalize:11 digits		
Outputs (Option)		Others			
Relay	Max. 8 outputs, programable	Power Supply	100-240VAC, 47-63Hz;		
Communication	RS485, RS232 serial port output	Consumption	Maximum 20VA (20W)		
	Standard MODBUS-RTU protocol	Insulation	Power to ground > 1500VAC		
Ethernet Output	Ethernet TCP/IP protocol		Power to housing > 1500VAC		
	Standard MODBUS TCP/IP protocol	Case material	Metal for case and bezel		
Printing	RS232 printing port	Mounting	Panel flush mounting		
Flow totalize	Temperature, pressure compensation	Size/Net Weight	144x144x180mm/2.0KG		
Math	+, -, x, /, mini, max, average	Working ambient	T: 0-50 deg CH: 10%-85 % (No dew)		

■ Output Specification (Option)

Relay Output		Flow Totalize	
Output No.	Max. 8 outputs	Display Type	Flow rate, Flow totalize, batch totalize
Relay type	NO, NC; 220VAC/30VDC/3A	Flow rate	-20000 to 20000, 5 digits
Output type	programmable, Individual output per channel or Common output for all channel,	Flow Totalize	0.0 to 2000000000.0, 11digits
Alarming type	HA, HHA, LA, LLA, DIFF. per channel	Batch Totalize	0.0 to 200000000.0, 10digits
Alarming display	HA, HHA, LA, LLA will be flashing when alarming occurs in screens	Decimal no.	Flow rate: 0-4, programable
Communication output			Totalizer: 1-5, programable
Output Type	RS485, RS232 serial port output	Compensation	Temperature, pressure compensation
Isolation	Photoelectrical isolated	Com. Type	superheating steam, saturated steam, gas linear pressure, linear temperature
Function	read and write the data and parameter	Square root	Off, different pressure on
Protocol	Standard MODBUS-RTU protocol		different pressure off
Baud rate	4800, 9600, 19200	Engineer unit	Flow rate: Kg/h, kg/s, t/h, M3/hr.....
Address	0-253, programmable		Flow totalize kg, t, m3....
Cable	RS485 shielded twisted pair cable		Batch totalize: kg, t, m3....
Ethernet Communication Output		Math	
Output	Ethernet communication output	Channel no.	1-12 channels
Protocol	MODBUS TCP/IP protocol	Math type	Plus.: +, Minus: -, multiply, division: ÷
Isolation	Photoelectrical isolated		Average, Max. Min.
Function	Read and write the data and parameter	Decimal No.	0-4, programmable
Printing Function		Polyline Math	
Output Type	RS232 printing port	Function	Used for value polyline offset
Data Type	History data in digital or curve	Channel no.	1-12 channels
Resolution	240dots/line	Polyline no.	0-6, programmable
Interval time	1-30000 seconds, programmable	Range	-20000 to 20000
Printing time	Programmable as required	Decimal no.	0-4, programmable
Printer (Suggested)		PC software	
Type	Dot Matrix, Ribbon mini printer	PC version	Window 2000/XP, VISTA, Win7, 8, 10
Resolution	96dots/line,	PC hardware	30MB or more
	144dots/line,	Installation	Please copy it to your PC directly
	240dots/line	PC software	free, Used when USB drive data transfer
size	122.6x66.6x73mm	Functions	Display the history data in digital and curve
Cut size	103mm(W)x57mm(H)x65mm(D)		Export the data as excel formal further
Net Weight	1kg		Print the history data in curve by printer
Paper Width	44mm/57mm		Flow totalize display in shift, week, month
Print Width	32mm/48mm	DCS software	Used for RS485 communication, option
Power supply	5VDC, 1.5A	Functions	Real time reading, monitoring while memory

Order Code

MPR4200 color paperless recorder, 144X144X73mm								Description
MPR4200	-X	-X	-X	-X	-X	-X	-X	MPR4200 universal paperless recorder
Channels No.	-01							1 channel
	-02							2 channels
	-03							3 channels
	-XX						
	-12							12 channels
Frequency Input								None
	-FI							Frequency input, 0-5KHz, 1 Channel
Communication Output								None
	-C1							photoelectric- isolated RS485 communication output
	-C2							photoelectric- isolated RS232 communication output
	-C3							photoelectric- isolated Ethernet communication output
Flow Totalize, Math Function								None
		-F						Flow totalize with Temperature, Pressure Compensation; Math Function
Relay Output								None
		-NO						1 Relay output: NO ,30VDC/3A, 220VAC/3A
		-2NO						2 Relay output: NC ,30VDC/3A, 220VAC/3A
	
		8NO						8 Relays output: NO ,30VDC/3A, 220VAC/3A
Print Output								None
		-P						RS232 Printing port for mini printer
Power Supply							-N	100-240VAC
							-D	24VDC

Note:

1. Order Code: E.g.: MPR4200-06- C1-F-NO-N: universal color paperless recorder, 6 channels, NO+NC, 3A, RS485 communication output, 100-240VAC, Flow totalizer with temperature and pressure compensation, math Function, 100-240VAC, USB data transferring and PC software.
2. Relay output can be as alarm output, also as simple on-off output.
3. Here 1 channel frequency input is included in 16 channels, MPR4200 max. 12 channels input. Please advise me the frequency input range or pulse input range when frequency input ordered.



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