

## PR Paperless Recorders

The PR series of paperless chart recorders offer a solution for most budgets and applications with outstanding specifications and features, at very competitive prices. The PR family includes:

- **PR10** Low-Cost, ideal for replacing 6-dotting chart recorders and 1, 2, 3 pen recorders, or where a low-cost solution is required. Available with 3 or 6-channel inputs, with a 4.3" TFT wide touch screen. The 'baby' of the family, but still very powerful!
- **PR20** Most Popular Model. Supports up to 24-channel inputs, medium sized with 5.6" TFT wide touch screen. Mid-range unit which is suitable for most applications.
- **PR30** The 'Daddy', the high-end of the range. Supports up to 48-channel inputs, large 12.1" TFT wide touch screen which offers a big clear display. If you need to monitor a lot of channels and need a big display this is the one for you.

All of the instruments are easy to program using either the front touch screen or the free software provided. As your application evolves, the input, output and communication modules can easily be changed by simply unplugging / plugging in the back of the recorder. Handwritten messages can be written on the front touch screen, which can be very handy for the users. Other features include:

- Fast sampling rates (100msec)
- SD card slot (16GB and 32GB SD card options)
- Short instrument depth: 171mm
- Multilingual – 20 languages
- Free basic software supplied. Extensive software also available
- Ethernet and USB port as standard, RS-232/422/485 available options
- Analogue, Digital Input and Output options, Relay Output options
- Clock and Timer (countdown, repeat countdown, daily, weekly or monthly)
- Web Server allows access to real-time trends, data, events and alarms whilst connected to the internet.
- Email functions are also available in communication standard firmware
- Password protection can be activated to safeguard the data and settings
- Auto-Output will send data automatically to a printer to print reports at specified times



Rear View (PR20 Model)



Replacement modules also available

### Technical Details

Model	PR10 	PR20 	PR30 
<b>Description</b>	Low-cost. Ideal for replacing 6-dotting chart recorders and 1,2,3 pen recorders.	Most popular model. Medium sized and powerful. Supports up to 24 channels.	High-end model. Ideal for sophisticated applications (e.g. power industry).
<b>Channels</b>	3, 6	3, 6, 12, 18, 24	6, 12, 18, 24, 30, 36, 42, 48
<b>Universal Inputs</b>	<b>Thermocouples:</b> K, J, T, N, E, R, S, B, L, U, P, W5, W3, LR, A1, A2, A3, M <b>RTD:</b> Pt50, Pt100, Pt200, Pt500, Pt1000 ( $\alpha=0.00385$ ), Pt50, Pt100 ( $\alpha=0.00391$ ), JPt50, JPt100, JPt200, JPt500, JPt1000 ( $\alpha=0.003916$ ), Cu10 ( $\alpha=0.00427$ ), Cu50, Cu100 ( $\alpha=0.00426, 0.00428$ ), Ni100, Ni200, Ni500, Ni1000 ( $\alpha=0.00617$ ), mA, V, mV 100 msec/dot, default setting 1 sec/dot		
<b>Sampling Rate</b>	100 msec/dot, default setting 1 sec/dot		
<b>Display</b>	4.3" TFT touch screen	5.6" TFT touch screen	12.1" TFT touch screen
<b>Resolution</b>	480 x 272	640 x 480	1024 x 768
<b>MTFB Backlight at 25°C</b>	30,000 hours	30,000 hours	60,000 hours
<b>Backlight</b>	LED		
<b>Screen Saver, Email</b>	Yes		
<b>CPU</b>	ARM Cortex-A8, 1GHz		
<b>Internal Flash Memory / RAM</b>	256 MB / 256 MB		
<b>Ethernet (Network)</b>	Modbus TCP/IP		
<b>RS-232/422/485</b>	Optional RS-232 or RS-422/485 Modbus RTU		
<b>SD Card Slot, USB Hosts</b>	1 x SD Card Slot (front), 1 x USB (front), 1 x USB (rear)		
<b>Pulse Input</b>	Optional Digital Input (DI) card offering either logic or high frequency pulse counter		
<b>START/STOP Key</b>	Starts/stops recording or turns off display (doesn't turn off recorder to allow quick start later)		
<b>Calibration Correction</b>	On-site calibration possible, Offset and Gain for correction		
<b>Multi-language</b>	20 languages including English, Brazil Portuguese, Chinese (simplified, traditional), Czech, Danish, Dutch, French, German, Greek, Italian, Japanese, Korean, Polish, Portuguese, Russian, Spanish, Swedish, Thai, Turkish + other languages possible		
<b>Software (PC)</b>	Free basic software with "Configuration" and "Historical Viewer". Optional "Data Acquisition Studio" software allows real-time monitoring		
<b>Power Supply</b>	90-250VAC or 11-36VDC		
<b>Outer Dimensions (W x H x L)</b>	144mm x 144mm x 189mm	144mm x 144mm x 189mm	288mm x 288mm x 189mm
<b>Mounting Depth</b>	171mm	171mm	171mm
<b>DIN Panel Cutout (W x H)</b>	137mm x 137mm	137mm x 137mm	281mm x 281mm
<b>Protection</b>	IP65 Front, IP20 Rear		
<b>Operating/Storage Temperature</b>	Operating Temperature: 0°C to +50°C, Storage Temperature: -30°C to +70°C		
<b>Safety Standards Available</b>	CE, cULus, RoHS		

Visit our website for full technical specifications and latest software compatibility information

## PR Paperless Recorders

PR20 Example (contact sales for other models)



1	analog inputs	other inputs and outputs †	code
PR20	3 Analog Inputs	None	PR2003-0
		3 relays + 3 DI	PR2003-6
		3 relays + 3 DI + 6 AO	PR2003-C
	6 Analog Inputs	6 relays	PR2006-1
		6 DI	PR2006-3
		6 AO	PR2006-5
		3 relays + 3 DI	PR2006-6
		6 relays + 6 DI	PR2006-7
		6 relays + 6 AO	PR2006-A
		6 DI + 6 AO	PR2006-B
	12 Analog Inputs	6 relays + 6 DI + 6 AO	PR2006-D
		None	PR2012-0
		6 relays	PR2012-1
		12 relays	PR2012-2
		6 DI	PR2012-3
		12 DI	PR2012-4
		6 AO	PR2012-5
		3 relays + 3 DI	PR2012-6
		6 relays + 6 DI	PR2012-7
		9 relays + 3 DI	PR2012-8
		3 relays + 9 DI	PR2012-9
	18 Analog Inputs	6 relays + 6 AO	PR2012-A
		6 DI + 6 AO	PR2012-B
		3 relays + 3 DI + 6 AO	PR2012-C
None		PR2018-0	
6 relays		PR2018-1	
6 DI		PR2018-3	
24 Analog Inputs	6 AO	PR2018-5	
	3 relays + 3 DI	PR2018-6	
	None	PR2024-0	

† Note: DI = Digital Inputs, AO = Analog Retransmission Output

2	<b>power</b>	code
	90-250 VAC, 50/60 Hz	A
	11-36 VDC	D
3	<b>communication</b>	code
	Standard Ethernet	0
	Ethernet + RS232	1
	Ethernet + RS-422/485	2
4	<b>firmware</b>	code
	Standard version	0
	Plus version 1 with extra mathematics, external channels, batch & FDA 21 CFR part 11	1
	Plus version 2 with custom edited display, and editing software Panel Studio to be supplied	2
	Plus version 3 including Plus version 1+2 above	3
5	<b>pc software</b>	code
	Free basic software: "Historical Viewer" + "Configuration"	1
	Extensive software: "Data Acquisition Studio" ("RealTime Viewer") + "Historical Viewer" + "Configuration"	2
6	<b>mounting type, power cord and switch</b>	code
	Panel mount, no power cord, no power switch	0
	Panel mount, no power cord, power switch	1
	Portable, UL & CSA power cord, power switch	2
	Portable, VDE power cord, power switch	3
	Portable, SAA power cord, power switch	4
	Portable, BS power cord, power switch	5
	Portable, GB power cord, power switch	6
7	<b>special options</b>	code
	None	00
	16 GB SD Card	S1
	32 GB SD Card	S2

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order code (example) 1 2 3 4 5 6 7  
PR2003-6 A 0 1 1 0 S2