

ATO paperless recorder is an important meter that can record, calculate, display and storage data. It does not consume any common recording materials, such as paper, pen and ink. A variety data can be recorded by the paperless recorder at the same time, such as temperature, pressure, flow, liquid level, voltage, current, humidity, frequency, vibration, speed and so on. The paperless chart recorder can directly display the recorded data on the LCD and in various forms, such as digital, bar graphs, curves, lists, and so on.

The main applications of paperless recorders are metallurgical, petroleum, chemical, building materials, papermaking, food, pharmaceutical, heat treatment and water treatment, and other industrial sites, as well as college laboratories, biological research laboratories, etc.

The paperless recorder has the characteristics of paperless recording, good real-time performance, high accuracy, communication, search ability and intelligence. The latest paperless recorder can also expand more functions, such as PID adjustment, flow accumulation and so on. It reduces the operating cost of the recorder, facilitated management, and improved work efficiency.

There are 3 types of paperless recorders on ATO online shop. Customers can choose the appropriate model according to the needs.

**ATO-PLR-CH18** is a 3.5 inches TFT true color LCD paperless recorder with power supply AC 176~264V (47~63Hz) or DC 24V, internal storage 48M bytes flash, 1-18 data channels, 18 kinds of input signals, 4 alarm outputs, RS485 communication output. It has functions of Front Panel, Digital Display, Bar Graph, Real-time Curve, Power Off Safeguard, Alarm, History, etc.



**ATO-PLR-CH48** is a 7 inches TFT true color LCD paperless chart recorder with power supply AC 85~264V (50/60Hz) or DC 12-36V, internal storage 64M bytes flash, 1-48 data channels, 33 kinds of input signals, 18 alarm outputs, 12 analog outputs, RS485/RS232/Ethernet communication output. It has additional functions of File List, Print, Backup, Configuration, etc.

**ATO-PLR-CH40** is a 10.4 inches TFT color LCD paperless chart recorder with power supply AC 85~265V (50Hz), internal storage 256M bytes flash, 8-40 data channels, 25 kinds of input signals, 24 alarm outputs, 8 analog outputs, RS485/RS232/Ethernet communication output, 8 external power supplies. Its additional function is the Computation in flow measurement.



All the packaging of paperless recorders includes a separate user manual. The specification is showing on the next page.

SKU	ATO-PLR-CH18	ATO-PLR-CH48	ATO-PLR-CH40
<b>Dimension (W*H*L)</b>	96*96*101mm	185*154*176mm	288*288*168mm
<b>Display</b>	3.5 inches LCD, 320*240	7 inches LCD, 800*480	10.4 inches LCD, 640*480
<b>Power supply</b>	AC 176~264V, DC 24V	AC 85~264V, DC 12~36V	AC 85~265V
<b>External power supply</b>	24VDC, 150mA	24VDC, ≤250mA	24VDC, 65mA (8 channels)
<b>Internal storage</b>	48M bytes flash	64M bytes flash	256M bytes flash
<b>External storage</b>	USB flash disk	USB flash disk and SD card	USB flash disk
<b>Number of Channel</b>	1, 2, 3, 4, 6, 8, 12, 16, 18	1, 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48	8, 12, 16, 24, 32, 40
<b>Input signal</b>	1) 0-20mA, 4-20mA, 0-5V, 0-10V, 1-5V 2) 0-20mV, -20~20mV, 0-100mV 3) Thermocouple: S, B, K, T, E, J, R, N type 4) RTD: Pt100, Cu50	1) 0-20mA, 4-20mA, 0-10mA, (4-20mA)^0.5, (0-10mA)^0.5 2) 0-5V, 0-10V, 1-5V, ±5V, (0-5V)^0.5, (1-5V)^0.5, 0-20mV, 0-100mV, ±20mV, ±100mV 3) Thermocouple: S, B, K, T, E, J, R, N, F2, WRE3-25, WRE5-26 4) RTD: Pt100, Cu50, Cu53, Cu100, BA1, BA2 5) 0-400Ω	1) 4-20mA, 0-10mA 2) 0-5V, 0-10V, 1-5V, 0-20mV, 0-100mV 3) Thermocouple: S, B, K, T, E, J, R, N, F1, F2, WRE3-25, WRE5-26 4) RTD: Pt100, Cu50, BA1, BA2 5) 0-350Ω 6) 0-10000Hz (customizable)
<b>Analog output</b>	-	12 analog outputs: 4-20mA, 0-20mA, 0-10mA, 1-5V, 0-5V, 0-10V	8 analog outputs: 4-20mA
<b>Alarm output</b>	4 alarm relay: NO, 2A/250VAC	18 alarm relay: NO, 1A / 250VAC should be ≤18.	24 alarm relay parameter: NO, 3A / 250VAC
<b>Communication output</b>	RS485	RS485, RS232, Ethernet	RS485, RS232, Ethernet
<b>Sampling period</b>	1s	1s	1s
<b>Recording interval</b>	1s~60min	1s, 2s, 4s, 6s, 15s, 30s, 60s, 120s, 240s	1s, 2s, 5s, 10s, 15s, 30s, 60s, 120s, 240s
<b>Storage length</b>	-	24 days~ 5825 days	72 hours/channel~ 720 days/channel
<b>Functions</b>	Front Panel, Digital Display, Bar Graph, Real-time Curve, Power Off Safeguard, Alarm, History	Overview Digital Display, Bar Graph, Real-time Curve, Power View, Alarm List, History Curve, File List, Print, Backup, Configuration	Overview Digital Display, Bar Graph, Real-time Curve, Alarm List, History Curve, Report, Print, Backup, Configuration, Computation (flow measurement)
<b>Operating temperature</b>	0~50°C (32~122°F)	-10~+50°C (14~122°F)	0~50°C (32~122°F)
<b>Relative humidity</b>	10~85%RH	10~90%RH	10~85%RH
<b>Warranty</b>	3 years	3 years	3 years