

# PCON-Y18-LP

Automatic Low Pressure Calibrator

## PRESYS

[www.presys.com.br](http://www.presys.com.br)



- For automatic calibration of low pressure measuring instruments including transmitters and switches. ■
- Integrated electric pump for positive and negative pressure generation. ■
- Encryption and protection of calibration data for 21 CFR Part 11 Compliance. ■
- Direct printing of calibration report (pass / fail) (PDF or connected USB printer). ■
- Gauge or differential pressures. ■

# PRESYS<sup>®</sup> Low Pressure Controller/Calibrator

The PCON-Y18-LP provides a complete solution for the test and calibration of your low pressure and differential gauges, transmitters and switches.

With its internal electrical air pump, the PCON-Y18-LP is especially designed to provide very low controlled pressure with stability as low as 0.01 Pa and accuracy of 0.25 Pa, all this at your fingertip and with a very friendly user interface.

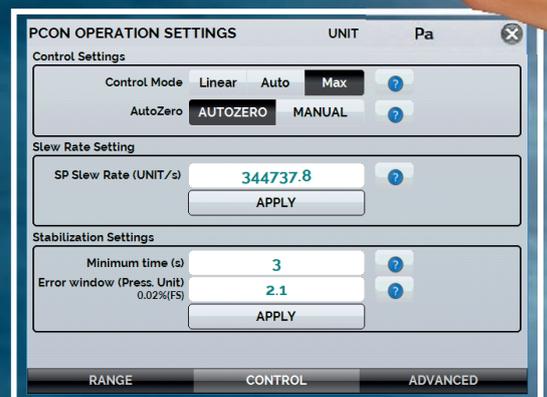
No extra software or computer is needed to generate the calibration test report on the fly and the data are tamper proofed in accordance with 21 CFR Part 11.

PCON-Y18-LP is a real documenting automated calibrator to calibrate more efficiently your instruments in the areas of clean room, filtration and ventilation that will become quickly an indispensable tool in your day to day work allowing real gains of productivity.

- ✓ Touch Screen display provides easy-to-read data and shows 2 simultaneous variables.
- ✓ Intuitive menu navigation helps to identify calibrator information for any operational mode.



- ✓ PRESET STEPS creation to optimize calibrations.
- ✓ Automatic testing of pressure switches.



- ✓ Different pressure control settings to avoid overshoot or to limit pressure increase/decrease rate.
- ✓ Pressure height of head correction.



- ✓ Fast calibration of gauges using jog keys to reach cardinal points.
- ✓ Calibrate your gauges in 5 minutes and directly print the report without writing anything down.
- ✓ SCPI Protocol to communicate with your existing application and replace your obsolete controller.



✓ Creation of Automatic Calibration Procedure.

POINT	EXPECTED	OBTAINED	ABS. ERR.	SPAN ERR.
-0.02 mmH2O	3.9989 mA	3.9871 mA	-0.0118 mA	-0.074%
75.14 mmH2O	8.0075 mA	8.0011 mA	-0.0064 mA	-0.040%
150.21 mmH2O	12.0112 mA	11.9943 mA	-0.0169 mA	-0.106%
225.20 mmH2O	16.0107 mA	16.0062 mA	-0.0045 mA	-0.028%
299.89 mmH2O	19.9941 mA	19.9910 mA	-0.0031 mA	-0.019%

Buttons: PRINT, CLEAR AS-LEFT, AS-FOUND, AS-LEFT, AS-FOUND ERR., AS-LEFT ERR., DETAILS

✓ Automatic cycling and generation of the calibration report on a direct connected USB printer or generation of a PDF file.

**CALIBRATION REPORT FOR TAG PRESYS**

TAG: vv      MODEL:

SERIAL NUMBER: ff      MANUFACTURER:

OUTPUT RANGE: 4 to 20 mA

PRESSURE CONTROL: 0 to 300 mmH2O

STANDARD:	SERIAL NUMBER	MODEL	NEXT CAL.	CERTIFICATE NUMBER
PRESYS	001.01.01	PCON-Y17	---	---

As-found performed by:

POINT	EXPECTED	OBTAINED	ERROR	SPAN ERR.	PASS/FAIL
-0.02 mmH2O	3.9989 mA	3.9871 mA	-0.0118 mA	-0.074%	Pass
75.14 mmH2O	8.0075 mA	8.0011 mA	-0.0064 mA	-0.040%	Pass
150.21 mmH2O	12.0112 mA	11.9943 mA	-0.0169 mA	-0.106%	Pass
225.20 mmH2O	16.0107 mA	16.0062 mA	-0.0045 mA	-0.028%	Pass
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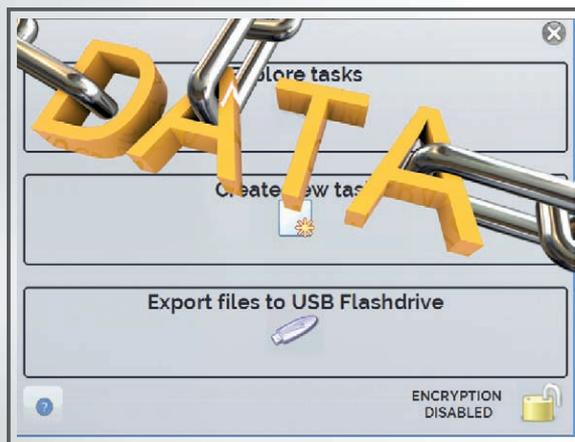
As-left performed by:

POINT	EXPECTED	OBTAINED	ERROR	SPAN ERR.	PASS/FAIL
0.010 mmH2O	4.0003 mA	3.9819 mA	-0.0184 mA	-0.110%	Pass
75.19 mmH2O	8.0103 mA	7.9963 mA	-0.0138 mA	-0.086%	Pass
149.86 mmH2O	11.9923 mA	11.9904 mA	-0.0021 mA	-0.013%	Pass
225.16 mmH2O	16.0085 mA	16.0029 mA	-0.0056 mA	-0.035%	Pass
300.06 mmH2O	20.0033 mA	19.9944 mA	-0.0089 mA	-0.055%	Pass

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✓ Encryption and protection of calibration data for 21 CFR Part 11 Compliance.



✓ 2 Channels datalogging feature.



## PCON-Y18-LP features

- ▶ 5.7" Touch Screen Color Display. Dual Core 1 GHz processor and Flash memory of 16 GB.
- ▶ Ethernet, Wi-Fi via USB/Ethernet router adapter, Serial USB with SCPI protocol.
- ▶ Integrated WebServer, client-server technology to pick-up tasks on remote server.
- ▶ Host/Device USB port.
- ▶ Optional HART® Communication.
- ▶ Pressure switch automatic testing.
- ▶ Input Current: -1 to 24.5 mA, ± 0.02% FS.
- ▶ Transmitter Power Supply: 24 Vdc regulated.
- ▶ Leak test.
- ▶ Temperature compensated accuracy from 0°C to 50°C.
- ▶ User selectable pressure unit: Pa, hPa, kPa, MPa, bar, mbar, psi, mmHg@0°C, cmHg@0°C, mHg@0°C, inHg@0°C, inH<sub>2</sub>O@4°C, mmH<sub>2</sub>O@4°C, cmH<sub>2</sub>O@4°C, mH<sub>2</sub>O@4°C, mmH<sub>2</sub>O@20°C, cmH<sub>2</sub>O@20°C, mH<sub>2</sub>O@20°C, kg/m<sup>2</sup>, kg/cm<sup>2</sup>, mtorr, torr, atm, lb/ft<sup>2</sup>.
- ▶ Control speed: 10 s (for 10 % FS pressure increase in a 50 ml test volume).
- ▶ Integrated electric pump for positive and negative pressure generation.

# Technical Specifications

## Order Code

**PCON-Y18-LP** - [ ] - [ ] [ ] - [ ]

### Mounting Version

**DT** - Desktop Version (for Workbench use)

**RM** - Rack Mounting Version (Fixed in a 19" Rack or Workbench)

### Hart® Communication

**NH** - Without Hart® Communication

**CH** - Hart® Calibrator (basic commands: zero, span, trim mA)

**FH** - Full-Hart® Configurator, with DD library from *FieldComm Group* and one year updates.

### Pressure Controller Range

Ranges	SI-Pascal	bar	Resolution	Control Stability	Accuracy
(0)	-100 to 100 Pa	-1 to 1 mbar	0.001 Pa	100 ppm 0.01 Pa	± 0.25 % FS
(1)	-1000 to 1000 Pa	-10 to 10 mbar	0.01 Pa	100 ppm 0.1 Pa	± 0.075 % FS
(2)	-2500 to 2500 Pa	-25 to 25 mbar	0.01 Pa	100 ppm 0.25 Pa	± 0.050 % FS
(3)	-7000 to 7000 Pa	-70 to 70 mbar	0.1 Pa	40 ppm 0.28 Pa	± 0.025 % FS
(4)	-35000 to 35000 Pa	-350 to 350 mbar	1 Pa	40 ppm 1.4 Pa	± 0.0125 % FS

**Pneumatic Connections:** connector for hose diameter 6 mm.

**Power Supply:** 100 to 240 Vac 50/60 Hz.

**Operating Ambient:** 0 to 50 °C, 90 % maximum relative humidity.

**Dimensions:** 125 mm x 300 mm x 265 mm (DT Version) /  
132 mm x 483 mm x 300 mm (RM Version) (HxWxD).

**Weight:** 6.2 kg (DT Version) / 8.5 kg (RM Version) nominal.

**Warranty:** 1 year.

Includes technical manual and test leads.  
Calibration Certificate (optional).

**Note:** Hart® is a Fieldcomm Group trademark.



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Your Distributor: