

Additel 761 Automated Pressure Calibrators



- Fully automated pressure calibrator with built-in pressure generator / controller to as high as 600 psi (40 bar) or as low as 0.01 Pa (0.00004 inH₂O)
- 0.02%FS accuracy
- Dual pressure modules
- Built-in filter and liquid trap with venting system prevents contamination of the calibrator
- Portable (12.4 lb)

OVERVIEW

With a built-in high performance electronic pump and precision pressure controller, the 761 series portable automated pressure calibrators provide a turn-key solution for calibration of gauges, transmitters, and switches both in the field and in the laboratory. In a portable package, this calibrator can automatically generate pressures from 90% vacuum to 600 psi (40 bar) with 0.005% FS pressure control stability and 0.02% FS accuracy. To improve the calibrator accuracy, two pressure modules with differing ranges are built-in and integrated with the internal pump and controller.

The 761-LLP is specially designed for low pressure calibration, and pressures as low as 0.01 Pa (0.00004 inH₂O) can be automatically generated and controlled.

The 761-BP is designed for barometric gauge calibration. With a quartz pressure sensor, the accuracy of 761-BP can achieve 0.01%FS accuracy.

With optional external pressure modules (160 series), the 761 can measure pressures up to 10,000 psi (700 bar) with 0.025%FS accuracy. In addition to the pressure generation, control, and measurement capabilities, the 761 also features HART communication capability, supplies 24V loop power, and reads the current or voltage produced by the pressure transducers. The 761 is a state of the art automated pressure calibrator which brings automated pressure calibration to the field.

FEATURES

- Pressure Range**
 Pressure generated by built-in pump and controlled automatically from 90% vacuum to 600 psi (40 bar)
 Pressure measured with external pressure modules (160 series) to 10,000 psi (700 bar)
- Accuracy (Fully temperature compensated)**
 0.02%FS
 0.05%FS (ADT761-LLP)
 0.01%FS (ADT761-BP)
- Control Stability**
 <0.005%FS
 ADT761-LLP: < 0.05 Pa (0.0002 inH₂O)
- Contamination prevention system**
 Built-in filter and liquid trap with venting system prevent contamination of the calibrator
 Solid particles can be blocked by built-in filter
 A small amount of Liquid can be collected by the built-in liquid trap
 Both solid particles and liquid can be blown out through the venting system
- Automation and Test Program**
 Fully Automated pressure calibration
 Task preset and auto run
 Auto step
- Easy to Use**
 User friendly interface
 Intuitive icon driven menu structure
- Sourcing and Measuring electrical signals**
 Measure mA or V with 0.01% RD + 0.005%FS accuracy
 Source/sink 0 to 22mA current
 24 VDC loop power supplied to pressure transmitter during test
 Automated switch test
- Misuse Protection**
 Up to 30V misuse protection on any two sockets
- Display**
 7" LCD color screen (800X480)
- Documenting and data logging**
 Task management capability
 Internal memory stores 200 tasks
 Download tasks and upload results
- HART Communication capability**
 Support HART instrumentation
- Rechargeable battery:**
 Rechargeable battery with up to 8 hours operation between charges
- Leak testing:**
 Apply leak test to an external pressure system to determine the magnitude of pressure variations due to leaks
- Pipeline Protection:** Special design the pipeline layout to avoid possible blockage and leakage
- Portable:** Only 12.4 lb
- Multi Lingual Interface**
 English, German, French, Italian, Spanish, Portuguese, Simplified Chinese
 (Traditional Chinese, Japanese and Russian are available per request)
- NIST Traceable:** NIST traceable calibration with data (included)



SPECIFICATIONS

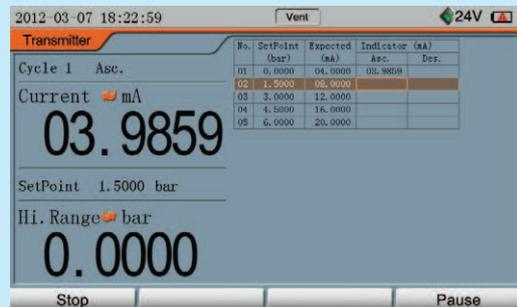
- Control Stability**
 <0.005%FS;
 ADT761-LLP: < 0.05 Pa (0.0002 inH₂O)
- Pressure Connections**
 G1/8 Female on calibrator
 Two 1/4NPT(or 1/2NPT, 1/4BSP, M20×1.5) female hand-tight connectors on the external pressure manifold (included)
- External Pressure Module Connection**
 External pressure module connector
- Electrical Connection**
 0.156 inch (4mm) banana sockets
- Documenting and data logging**
 Task management capability
 Internal memory stores 200 tasks
 Download tasks and upload results
- Display**
 7" LCD color screen (800×480)
 Display rate: 5 readings per second
- Pressure Units**
 Pa, kPa, MPa, psi, bar, mbar, inH₂O@4°C, mmH₂O@4°C, inH₂O@20°C, mmH₂O@20°C, inHg@0°C, mmHg@0°C, kgf/cm², and hPa (ADT761-BP)
- Power**
 Battery: Rechargeable Li-ion Polymer battery (included)
 Li-Battery working time: ~8 hours
 Recharge time: ~3 hours
 External Power: 110/220V Power adapter (DC 27 V) (Included)
- Environmental Specification:**
 Operating temperature: 32°F to 122°F (0°C to 50°C)
 Compensated Temperature: 32°F to 122°F (0°C to 50°C)
 Storage temperature: -20°C to 60°C
 Humidity: <90%, non-condensing
- European Compliance:** CE Marked
- Communication**
 RS232 (DB9/F, environmentally sealed)
 Baud rate: 2400, 4800, 9600, 19200, 38400, 57600, 115200
 Data length: 7 Bits, 8 Bits
 Stop bit: 1 Bit, 2 Bits
 Address: from 1 to 121
- Dimension**
 11.65" X 7.32" X 7.09"(296mm X186mm X180mm)
- Weight:** 12.4 lb (5.6 kg)
- Warranty:** 18 months



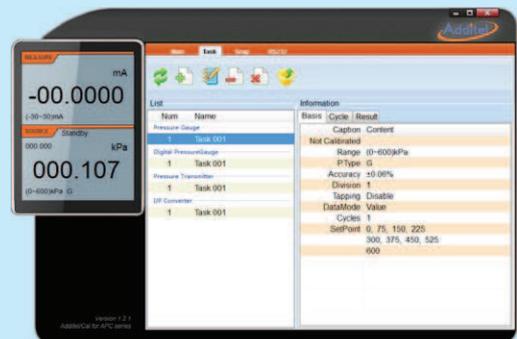
Task Manual



Built-in User's Manual



Pressure gauge / transmitter / switch calibration



Documenting