

Additel 209 and 210 Series Loop Calibrator

- Accuracy to 0.01% of reading
- Small and rugged handheld design
- Measure, source, or simulate loop current
- Measure DC volts
- Simultaneously mA and % span display
- Switch functionality
- Selectable ramp and step functions
- Easy to read display and user interface
- HART 250Ω resistor in series with 24V loop



OVERVIEW

The new Additel 209 and 210 loop calibrator series combine ease of use and functionality, making them the ideal tools to troubleshoot your process loop. The ADT209 has an accuracy of 0.03% of reading whereas the ADT210 holds an accuracy of 0.01% of reading. If you want to source, simulate or simply measure, the Additel Loop calibrator series will fit your need. The ADT209 and ADT210 allow for measurement of current, voltage and a switch. You can also simulate or source mA or a process transmitter. With a push of a button, you can switch to zero and span values, auto ramp, and auto step throughout the range. Each loop calibrator has a large, easy to read screen which simultaneously displays the measurement with the % of span.

ELECTRICAL MEASURE SPECIFICATIONS

| | Range | Resolution | ADT209 Accuracy | ADT210 Accuracy |
|-------------------------|--|------------|-----------------|-----------------|
| Voltage DC ¹ | 0 to 30 V | 1 mV | 0.03%RD + 2mV | 0.01%RD + 2mV |
| Current DC ² | 0 to 24 mA | 1 μA | 0.03%RD + 2μA | 0.01%RD + 2μA |
| Switch test | Input resistance more than 500 MΩ Trigger level: low level <0.3V; high level: >2V | | | |

[1] 1MΩ input resistance

[2] Loop transmitter current measure: 7000Ω maximum

ELECTRICAL SOURCE SPECIFICATIONS

| | Range | Resolution | ADT209 Accuracy | ADT210 Accuracy |
|-------------|---|------------|-----------------|-----------------|
| Current DC | 0 to 24 mA | 1 μA | 0.03%RD + 2μA | 0.01%RD + 2μA |
| Source mode | 7000Ω/20 mA maximum | | | |
| Sink mode | External loop voltage nominal 24V, maximum 30V, minimum 12V | | | |

GENERAL SPECIFICATIONS

| | |
|-----------------------------|---|
| Voltage limit | 30V between terminals or between terminals and ground |
| Measurement Functions | Auto step, auto ramp, span step |
| Display | VA LCD display. 2.04 x 2.04 in (52 x 52 mm) |
| Loop power | 24V |
| Over-voltage protection | 30V DC (240V AC) |
| Overload current protection | 33 mA DC |
| Storage temperature | -20°C to 70°C |
| Working Environment | -10 to 50°C, 95%RH |
| Working Altitude | <3,000 m |
| Vibration/shock | Random 2G 5 to 500Hz 1 meter drop |
| Power | One 9V alkaline battery (ANSI/NEDA 1604A or IEC) DC9V optional adapter available |
| Battery life (typical) | Output mode: 18 hours (12 mA/500Ω) Measure mode: 50 hours |
| Size (LxWxH) | 163 x 83 x 41 mm |
| Weight | 350 g |
| Calibration Certification | NIST-traceable certificate of calibration with data |
| Compliance Certification | ADT209: CSA, CE, DNV ADT210: CSA, CE, DNV |
| Warranty | 3 years |

ORDERING INFORMATION

Model Number

ADT209

ADT210

Accessories included

| | |
|---------------------|-------|
| Test lead set | 1 set |
| Alligator clips | 2 pcs |
| User manual | 1 pc |
| 9V Alkaline battery | 1 pc |

Optional Accessories

| | |
|------|--|
| 9812 | 110V/220V external power adapter (DC 9V) |
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