Additel 220
Multifunction Loop Calibrator

- Measure and source loop current, mV, and V
- Measure and source simultaneously
- Loop Continuity Test capability
- 24V loop supply with simultaneous current measurement
- 3 year warranty



OVERVIEW

The 220 is a highly integrated loop calibrator featuring several patented technologies. The calibrator is an ultra-compact, rugged, and best of all, easy to use hand-held device that will source, simulate and measure loop current, mV/V, Loop Continuity Test, and also perform switch testing. Its smart phone-like menu and interface makes it simple and easy to use. The 220 is ideal for calibrating, maintaining, and troubleshooting various loop devices in the field.

FEATURES

- **Measuring and sourcing loop current, mV and V**
  Measures loop current up to 30mA with 0.1μA resolution
  Measures voltage signals up to 60 V, and mV signals up to 300 mV
  Sources/sink loop current, mV and V
  24V loop power supply with simultaneous current measurement
  Simultaneous dual reading capability
  Capture switch
- **Data statistics and analysis**
  Display max, min, peak-to-peak, average, and percentage simultaneously
  Convert data to a real physical value through re-scaling function
- **On-demand logging**
  High-capacity storage with up to twenty thousand records
  On-line view, index, analyze, auto-curve, and list the data
- **Various sources and converting mode**
  Support linear, flow, valve, and 25% stepping source
  Auto-source of ramping and stepping
  Gauge span examination
- **"As Cal" on-site calibration tools**
  Four on-site calibration tools preset: loop indicator, sensor/transmitter, signal isolator/converter, and limit alarm/switch
- **Support 2W transmitter connection**
- **Multi lingual interface**
  English,Simplified Chinese
- **Convenient tools**
  Calculator, thermocouple converter, HOLD screen lock
- **Display rate**
  4 readings/second
- **Easy to use**
  Smartphone-like menu and interface make the operation simpler and easier
  Ultra-compact, size 3.9" x 7.6" x 2.0" (100mm x 192mm x 52mm), and weight 1.6 lb (0.7 kg)
  One hand operation
- **Snapshot**
  Save and manage up to 100 snapshots
- **Display**
  3.5 inch TFT color screen
  4, 5, or 6 digits adjustable display
- **Rugged**
  Rugged design for harsh environments.
  Passed a 1-meter drop test
  Three years warranty for the 220, and one year for the battery pack
- **Misuse protection and Electrical isolation**
  Up to 30V voltage on any two sockets and up to 1A current on current sockets will not damage the calibrator. The calibrator will return to normal condition as soon as the voltage or current is removed.
  Measuring, sourcing and loop power circuits are electrically isolated each other.
- **Rechargeable battery**
  Rechargeable Li-ion battery for 15 hours uninterrupted use.
  Battery life will be reduced when 24V is applied.
  The rechargeable battery is replaceable.
- **ISO17025 accredited calibration with data**
- **Firmware upgrade**
  Support firmware upgrade when available
- **Warranty:** 3 years

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Additel 220

Multifunction Loop Calibrator

APPLICATIONS

The 220 loop calibrator is a process tool for measuring, sourcing and simulating mA, mV and V, captures switch values and provides 24V loop power. It is a high performance solution for calibration, repair and maintenance of various loops devices, Loop Continuity Test, and switch capture.

SPECIFICATIONS

Electrical Specifications

Measurement Accuracy			
	Range	**Resolution**	**Accuracy**
Voltage DC	-300.000 to 300.000 mV	1μV	0.01%RD+15μV
	-60.0000 to 60.0000 V	0.1mV	0.01%RD+3mV
Current DC	-30.0000 to 30.0000 mA	0.1μA	0.01%RD+1.5μA
Loop Continuity	0 to 2000.0 ohm	0.1Ω	0.02%RD+0.2Ω
Switch Test	For the contact with potential, the voltage within the range 3V to 24V.		

Source Accuracy			
Voltage DC	-10.00 to 200.00 mV	0.01mV	0.02%RD+10.5μV
	0 to 12.000 V	1mV	0.02%RD+0.6mV
Current DC	0 to 22.000 mA	1μA	0.02%RD+1.1μA
DC24V	N/A	N/A	0.5V

General Specifications

Environmental Specifications	
Operating Temperature	-10°C to 50°C
Storage Temperature	-20°C to 60°C
Humidity	<90%, non-condensing

Safety Specifications	
European Compliance	CE Mark

Mechanical Specifications	
Display	3.5 inch TFT color screen
Electrical Connection	Ø4mm sockets and flat mini-jack thermocouple socket
RS232 Interface	Standard RS232-DB9 socket
Size	3.9" x 7.6" x 2.0" (100mm x 192mm x 52mm)
Weight	1.6 lb (0.7 kg)
Power Supply	Polymer Li-ion rechargeable battery,or 10V DC adaptor
Battery	Rechargeable Li-ion battery (included)
Battery Life	15 hours uninterrupted use Battery life will be reduced when 24V is applied
Battery Charge	110V/220V external power adapter (included)

ORDERING INFORMATION

Model Number

ADT220

Accessories (included)		
9816-X	110V/220V external power adapter	1 pc
9712	Chargeable Li-ion battery	1 pc
9022	Test leads	2 sets(4 pcs)
9020	Short circuit cable	1 sets(2 pcs)
	User Manual	1 pc
	ISO17025 accredited calibration certificate	1 pc

* Additel/Land software could be downloaded for free at www.additel.com

Optional Accessories	
Model number	**Description**
9050	USB to RS232 (DB-9 Male) Adapter
9050-EXT	RS 232 (DB9/M) extension cable, 9 feet
9712	Spare chargeable Li-ion battery for multifunction calibrator
9816	110V/220V external power adapter
9906	Carrying case for multifunction calibrator

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