



OVERVIEW

A highly integrated loop calibrator featuring several patented technologies, the ADT220 is an ultra-compact, rugged, and ease-to-use hand-held device for sourcing, simulating and measuring loop current, mV and V, checking loop integrity, and capture switches. Its smartphone-like menu and interface make the operation simpler and easier. The ADT220 is ideal for calibrating, maintaining, and troubleshooting various loop

FEATURES

- ▶ Measuring and sourcing loop current, mV and V
 - Measures loop current up to 30mA with 0.1 μ A resolution
 - Measures voltage signals up to 60 V, and mV signals up to 300 mV
 - Sources loop current, mV and V
 - 24V loop power supply with simultaneous current measurement
 - Simultaneous dual reading capability
 - Automatic switch test
- ▶ 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.

- ▶ Data 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
- ▶ Multilingual interface
 - English, Chinese
- ▶ 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 ADT220, and one year for the battery pack
- ▶ Misuse protection
 - 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
- ▶ Convenient tools
 - Calculator, thermocouple converter, HOLD screen lock
- ▶ 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
- ▶ Firmware upgrade
 - Support firmware upgrade when available

APPLICATIONS

Con ADT220 loop calibrator is a process tool for measuring, sourcing and simulating mA, mV and V, captures switch values and provides 24 V loop power. It is a high performance solution for calibration, repair and maintenance of current loops.

SPECIFICATIONS

Electrical Specifications

Measurement Accuracy			
	Range	Resolution	Accuracy
Voltage DC	-300.000 to 300.000 mV	1 μ V	0.01%RD+0.005%FS
	-60.0000 to 60.0000 V	0.1mV	0.01%RD+0.005%FS
Current DC	-30.0000 to 30.0000 mA	0.1 μ A	0.01%RD+0.005%FS
Loop integrity test	0 to 2000.0 ohm	0.1 Ω	0.02%RD+0.2 Ω
Frequency	1 to 50000.0 Hz	0.1Hz	0.005%RD+0.002%FS
On/off	In case the switch comes with voltage, the voltage range: 3 to 24V		
Source Accuracy			
Voltage DC	-10.00 to 200.000 mV	0.01mV	0.02%RD+0.005%FS
	0 to 12.0000 V	1mV	0.02%RD+0.005%FS
Current DC	0 to 22.000 mA	1 μ A	0.02%RD+0.005%FS
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 Marked

Mechanical Specifications	
Display	3.5 inch TFT color screen
Electrical Connection	ϕ 4mm sockets
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)

100V/220v external power adapter	1pc
Chargeable Li-ion battery	1pc
Test leads	2 sets(4pcs)
short circuit cable	1 set(2pcs)

Optional Accessories:

Model Number	Description
9050	USB to RS232(DB-9 Male) Adapter
9712	Spare chargeable Li-ion battery for multifunction calibrator
9816	110V/220V external power adapter for multifunction calibrator
9906	Carrying case for multifunction calibrator
9510	Task management software for multifunction calibrator
9121-312	NIM traceable calibration certificate for multifunction calibrator