



Loop Calibrator LC-505

- Measures and generates standard linear signals for current and voltage loops (mA and volt).
- Simultaneous input and output operation.
- Internal regulated 24 Vdc power supply for 2-wire transmitters.
- Special function for transmitter calibration converts any input signal into any output signal.
- Square root function for mA input or output.
- Automatic power off configuration to save battery.
- Small, battery-operated, portable (rechargeable battery, charger and carrying case included).
- Interface with Windows-based Calibration Software ISOPLAN® to provide a true Computer-Aided Calibration System.
- Real-time data acquisition capability when connected to a computer.

LC-505 loop calibrator allows the measurement and generation of signals used in current (4- 20 mA) and voltage (1-5 V, 0-10 V) loops. Distinguished from regular loop calibrators due to its high-accuracy, possibility of simultaneous measurement and generation of isolated signals, on-line communication with computer, working as a data acquisition point, and full computer-aid for instrument calibration and adjustment tasks. Incorporates the most modern concepts of calibration and adjustment via computer, where data are shared between instrument and computer, improving efficiency in handling information through report and certificate issues, automatic work management, data organization and storage for an overall coverage of quality procedure requirements, specially those related to ISO-9000. When connected to a computer it can be used for real-time data acquisition.

Specifications - Input

Input Ranges	Resolution	Accuracy	Remarks
volt -10 to 11 V	0.0001 V	± 0.02 % FS*	R _{input} > 1 MΩ
11 to 45 V	0.0001 V	± 0.02 % FS	
mA -5 to 24.5 mA	0.0001 mA	± 0.02 % FS	R _{input} < 160 Ω

Specifications - Output

Output Ranges	Resolution	Accuracy	Remarks
volt -1 to 11 V	0.0001 V	± 0.02 % FS	R _{output} < 0.3 Ω
mA 0 to 22 mA	0.0001 mA	± 0.02 % FS	R _{maximum} = 700 Ω
Two-wire transmitter (XTR) 4 to 22 mA	0.0001 mA	± 0.02 % FS	V _{maximum} = 60 V

*FS = Full Scale

Accuracy values are valid within one year and temperature range of 20 to 26 °C. Outside these limits add 0.001 % FS / °C, taking 23 °C as the reference temperature.

Serial Communication: Modbus® RTU Protocol (RS-232/ RS-485)

Dimensions: 56 mm x 144 mm x 72 mm (HxWxD)

Weight: 0.6 kg approx.

Warranty: 1 year, except for rechargeable battery.

Included Items: carrying case, test leads, manual battery charger.

Optional Accessories:

Communication Interface - Order Code: 06.02.0001-00.