

UPS III



Loop Calibrator

- Measure or Source 0 to 24 mA
- Accuracy 0.01% of reading
- Dual mA and % readout, linear or flow
- Step, Span Check, Valve Check, Ramp
- 60 Vd.c. measurement and continuity
- HART® compatible



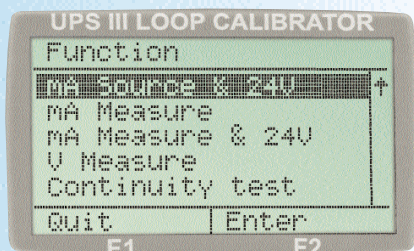
UPS III

Loop Calibrator

The UPS III is a rugged and extremely compact Loop Calibrator. Measuring 77 x 129mm and weighing just 275g, it fits comfortably in a shirt pocket. It is an essential tool for loop testing, instrument maintenance and valve set-up, with an easy to read display and simple to use time saving features.

Graphic display

The graphic display with menu-driven interface is easier to use than traditional knobs, switches, multi-function keys and dual key sequences.



Measure or source 0 to 24 mA

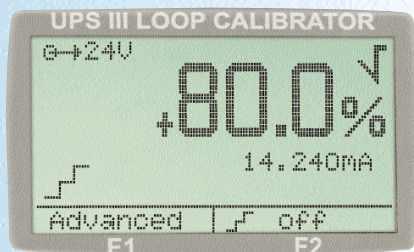
An internal 24 volt loop supply is available in both measure and source modes, essential during plant shut-downs.

Accuracy 0.01% of reading

This includes 12 month stability and temperature effects. The UPS III can maintain a 4:1 calibration ratio with the latest instrumentation and is typically 20 to 80 times more accurate than a DMM (Digital Multi-Meter).

Simultaneous % readout

Displays mA and the percentage value of 4 to 20 or 0 to 20mA. The UPS III also converts mA readings to % Flow. This is not possible with many loop calibrators.



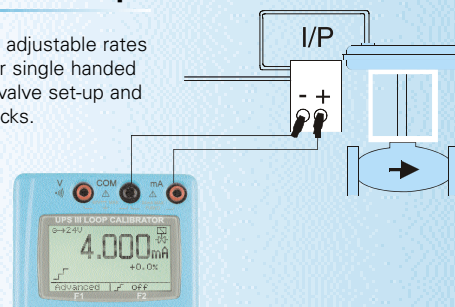
Step, Span Check and Valve Check

Step quickly through linearity tests and zero/span adjustments. In Valve mode, seating can be checked and the positioner set.

STEP MODE	0%	25%	50%	75%	100%
4 to 20 mA Linear	4	8	12	16	20
0 to 20 mA Linear	0	5	10	15	20
4 to 20 mA Flow	4	5	8	13	20
0 to 20 mA Flow	0	1.25	5	11.25	20
4 to 20 Span Check	4				20
0 to 20 Span Check	0				20
4 to 20 mA Valve	38, 4, 42		12		19, 20, 21

Auto Step and Ramp

Outputs have adjustable rates (1 to 599s) for single handed loop testing, valve set-up and slew rate checks.



"Fast Set" output

Allows values to be set to within 0.001 mA using the arrow keys. Holding a key quickly ramps the output to the next value. The system is ideal for alarm trip tests.



60 volt dc measurement

For loop diagnostics and maintenance of voltage output instruments.

Continuity and switch test facility

This reduces DMM dependence when fault finding, checking loop integrity and testing switches.

HART® compatible

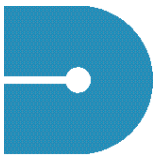
Internal 235Ω loop resistor (menu selectable).

EMC compliance to EN 61326-1

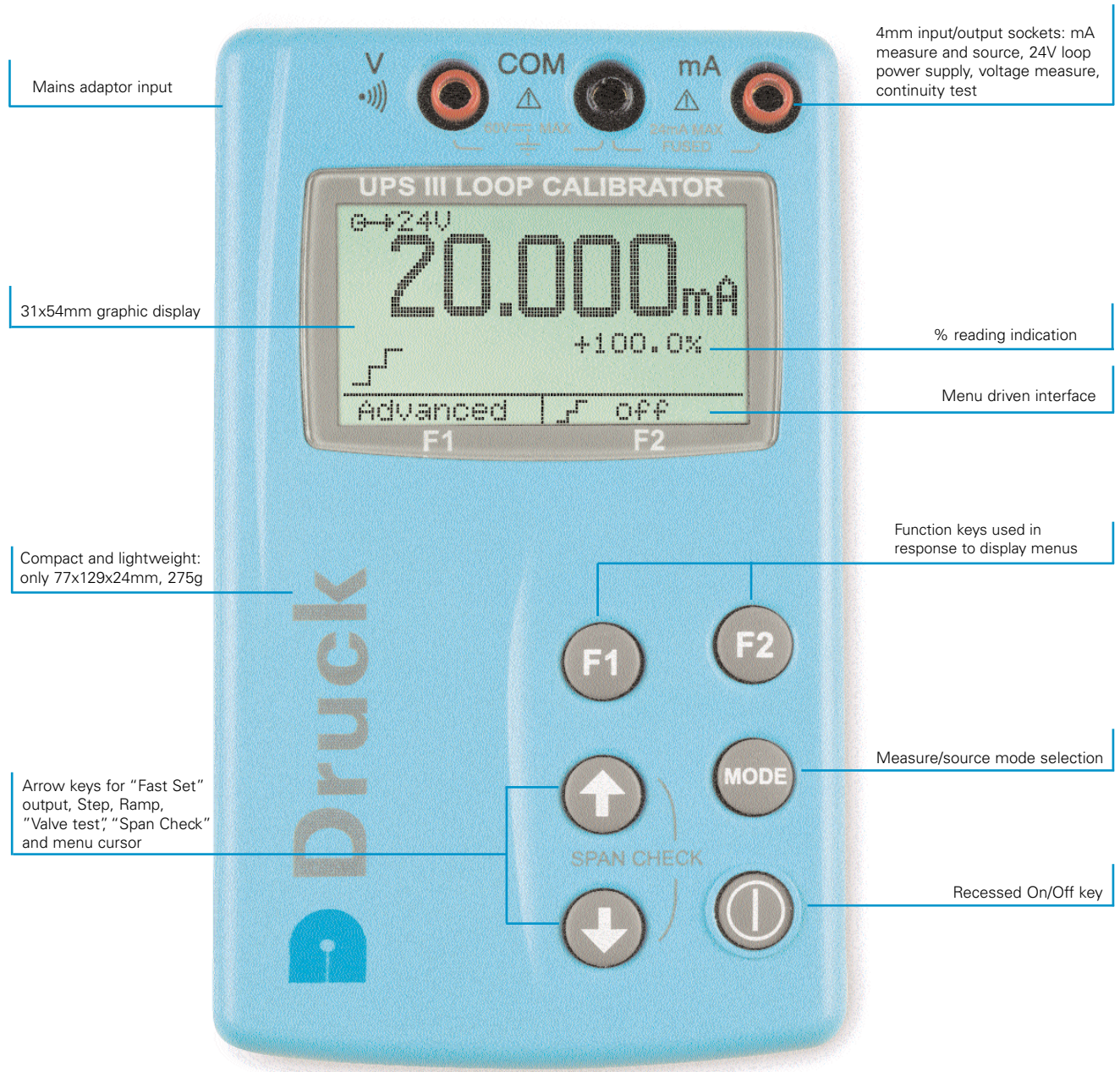
Complies with heavy industry standard. Most loop calibrators are only suitable for light industrial use.

Other Features

- Adjustable display contrast
- Adjustable resolution
- Uses industry standard AA batteries
- Battery voltage and battery low indicator
- Information screen reports serial number, software version and calibration date.
- Primary reading in mA or %
- Auto power off (enable or disable)
- Pin protected closed case calibration.
- Optional protective over-boot with bench stand, hanging loop and quick connect belt clip.
- Optional carry case with belt loop.
- Optional mains power adaptor



Druck



Loop Calibrator

SPECIFICATIONS

Performance

Function	Range	Resolution	1 yr Accuracy ¹ %rdg + counts	Remarks
Source mA	24 mA	0.001	0.01% + 2	V-max. 75V
Source mA and 24V	24 mA	0.001	0.01% + 2	R-max 1 kΩ at 20 mA
Measure mA	24 mA	0.001	0.01% + 2	V-max. 75V
Measure mA and 24V	24 mA	0.001	0.01% + 2	Rmeasure 15Ω
Measure V	60 V	0.001	0.02% + 4	Rmeasure 1MΩ
Continuity	<100Ω			1 mA current

¹ Accuracy includes temperature effects 17°C to 27°C. For use outside these limits add 0.003%/°C.

Electrical

Power supply:	4 x 1.5 V AA-size alkaline batteries (standard) or mains adaptor (See option C)
Battery life:	75 hours in read mode, 18 hours at 12mA
Auto power down:	30 minutes after last key press
Low battery Warning:	Battery symbol displayed
Open loop:	Flashes "OPEN LOOP"
Loop resistance high:	Flashes "CHECK LOOP Ω"
Out of range:	Displays <<<< (under), >>>> (over)
HART® Resistor:	235Ω menu selectable loop resistor

Environmental

Calibration reference:	22°C ± 1°C / RH 45% ± 15%
Operating temperature:	-10°C to 50°C
Relative humidity:	0 to 90% non-condensing
Conformity:	EN 61010, EN 61326-1(1997)+A1(1998), CE marked

Physical

Housing material:	High impact ABS
Dimensions:	77 x 129 x 24 mm
Weight:	275 grams including batteries
Display:	Graphic LCD (31 x 54 mm)
Electrical terminals:	Gold plated, 4-mm sockets

OPTIONS

(A) Protective over-boot P/N UNO-38023

This Nitrile rubber over-boot provides maximum impact protection. A bench stand, hanging loop and two part "quick fit" belt attachment are incorporated into the design.

(B) Carry case P/N UNO-38016

A sturdy fabric case with soft transparent window allows the UPS III to be used without removal.

(C) Mains adaptor P/N 191-129

A universal mains input adaptor to power the UPS III.

SUPPLIED AS STANDARD

The UPS III is supplied as standard with a certificate of calibration, user guide, test leads and a set of alkaline batteries.

CALIBRATION STANDARDS

Instruments manufactured by Druck are calibrated against precision equipment traceable to International Standards.

RELATED PRODUCTS

Portable field calibrators

Druck manufacture a comprehensive range of portable pressure, temperature and electrical field calibrators. A selection is shown below.



Laboratory and workshop instruments

Druck manufacture a comprehensive range of pressure indicators and controllers. Also included are Pressurements industrial deadweight testers and Ruska high precision controllers and primary standard piston gauges.

Pressure transducers and transmitters

Druck manufacture a wide range of pressure transducers and transmitters including analogue, digital and HART®/Smart devices. Please refer to Druck for further information.

ORDERING INFORMATION

Please state the following:

1. Model: UPS III
2. Option part numbers (if required). Please order as separate items.

Continuing development sometimes necessitates specification changes without notice.

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