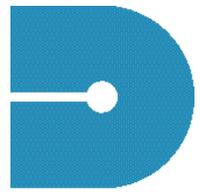


III

# UPS III



**Druck**

## Loop Calibrator

UPS

- 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



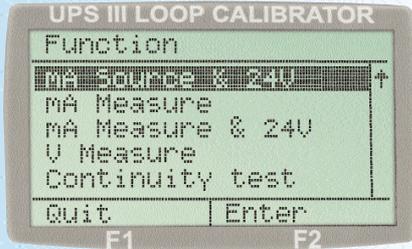
# UPS III

## 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

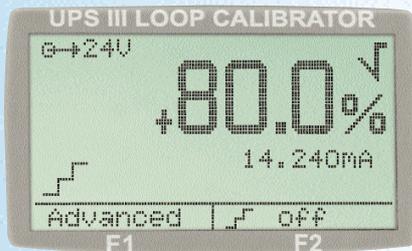
An internal 24 volt loop supply is available in both measure and source modes, essential during plant shut-downs.

### 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.



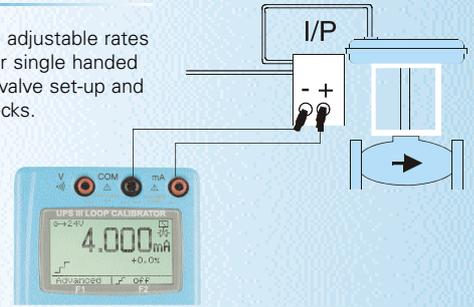
### Step, Span Check and Valve Check

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

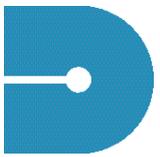
Internal 235Ω loop resistor (menu selectable).

### 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 <sup>1</sup> %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	R <sub>measure</sub> 15Ω
Measure V	60 V	0.001	0.02% + 4	R <sub>measure</sub> 1MΩ
Continuity	<100Ω			1 mA current

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

#### Electrical

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

#### Environmental

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

#### Physical

<b>Housing material:</b>	High impact ABS
<b>Dimensions:</b>	77 x 129 x 24 mm
<b>Weight:</b>	275 grams including batteries
<b>Display:</b>	Graphic LCD (31 x 54 mm)
<b>Electrical terminals:</b>	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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