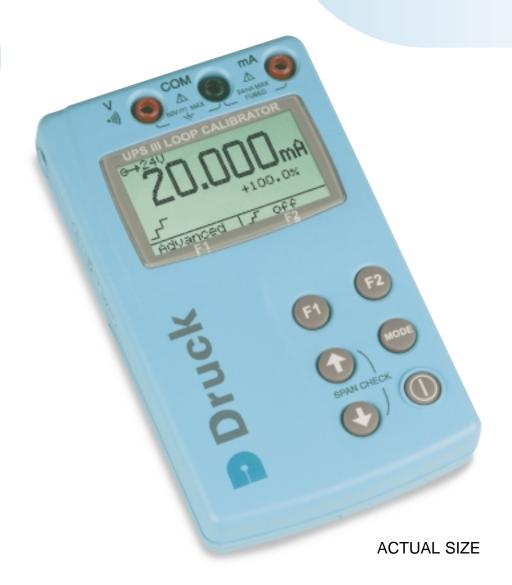




# UPS III

**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<sup>®</sup> compatible



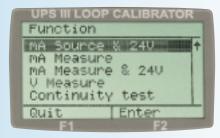
# UPS III

# **Loop Calibrator**

The UPS III is a rugged and extremely compact Loop Calibrator. Measuring 3" x 5" and weighing just 9.7 ounces, 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

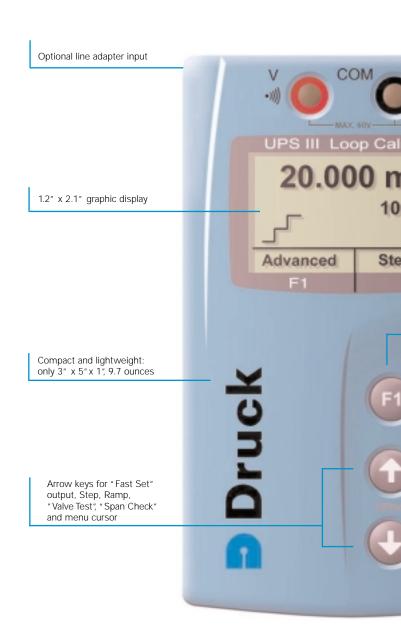
Displays mA and the percentage value of 4 to 20 or 0 to 20 mA. The UPS III also converts mA readings to % Flow. This is not possible with many loop calibrators.



### Step, Span Check and Valve Check

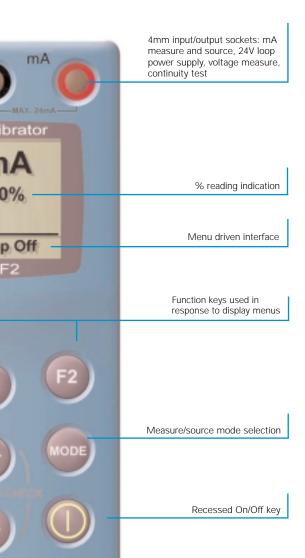
Step quickly through linearity tests and zero/span adjustments. In Valve mode, seating can be checked and the positioner set.

| 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   | 3.8, 4, 4.2 |      | 12  |       | 19, 20, 21 |
|                    |             |      |     |       |            |



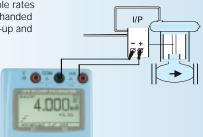


# **Druck**



## **Auto Step and Ramp**

Outputs have adjustable rates (1 to 599 s) 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  $235\Omega$  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 rubber boot with bench stand, hanging loop and quick connect belt clip
- Optional AC line adapter

# UPS III



# **Loop Calibrator**

# Druck

### **SPECIFICATIONS**

#### **Performance**

| Function           | Range | Resolution | 1 yr Accuracy <sup>1</sup><br>%rdg + counts |                          |
|--------------------|-------|------------|---|--------------------------|
| 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 k $\Omega$ 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 $1M\Omega$      |
| Continuity         | <100Ω |            |   | 1 mA current             |

1 Accuracy includes temperature effects 62°F to 80°F. For use outside these limits add .002%/°F.

### **Electrical**

**Power supply:** 4 x 1.5 V AA-size alkaline batteries (standard)

or universal power supply (See option B) 75 hours in read mode, 18 hours at 12mA

Battery life: 75 hours in read mode, 18 hours
Auto power down: 30 minutes after last key press
Low battery Warning: Battery symbol displayed

Out of range: Displays <<<< (under), >>> (over) HART<sup>®</sup> Resistor:  $235\Omega$  menu selectable loop resistor

#### **Environmental**

Calibration reference: 72°F ± 2°F / RH 45% ± 15%

Operating temperature: 14°F to 122°F

**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:** 3" x 5" x 1"

Weight: 9.7 ounces including batteries
Display: Graphic LCD (1.2" x 2.1")
Electrical terminals: Gold plated, 4-mm sockets

## **OPTIONS**

#### (A) Protective rubber boot - P/N 860-A018

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) Universal power supply - P/N 191-A023
AC line adapter to power the UPS III.

### SUPPLIED AS STANDARD

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

### **CALIBRATION STANDARDS**

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

### 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 analog, 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.

Druck is an ISO 9001 registered company.







35 Vantage Point Drive // Rochester, NY 14624 // Call 1.800.800.5001



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