

# GE Sensing

## Features

- ATEX/IEC intrinsically safe
- Measure or source 0 to 24 mA
- Accuracy 0.015% of reading
- Dual mA and % readout, linear or flow
- Step, span check, valve check, ramp
- 50 VDC measurement and continuity
- Hart® compatible

The UPS III IS is a rugged and extremely compact loop calibrator. Measuring 3.5 in x 5.5 in x 1.7 in (90 mm x 140 mm x 42 mm) and weighing just 16.2 oz (460 g). 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.

# UPS III IS Druck Loop Calibrator

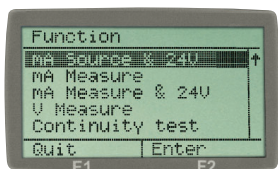
UPS III IS is a Druck product. Druck has joined other GE high-technology sensing businesses under a new name—GE Industrial, Sensing.



# GE Sensing

## 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

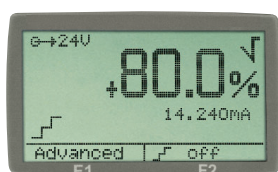
An internal loop supply is available in both measure and source modes, essential during plant shutdowns.

## Accuracy 0.015% of Reading

This includes 12 month stability and temperature effects. The UPS III IS can maintain a 4:1 calibration ratio with the latest instrumentation and is typically 10 to 40 times more accurate than a Digital Multi-Meter (DMM).

## Simultaneous % Readout

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



## Step, Span Check and Value Check

Step quickly through linearity tests and zero/span adjustments. In valve mode, seating can be checked and the actuator 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 mA span check	4	–	–	–	20
0 to 20 mA span check	0	–	–	–	20
4 to 20 mA valve	3.8, 4, 4.2	–	12	–	19, 20, 21

## 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.

## 50 VDC 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 220 Ω 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
- Leather case with carry strap (Note: the UPS III IS must be used in the case for hazardous area use)

# UPS III IS Specifications

## Performance

Function	Range	Resolution	1 year Accuracy <sup>1</sup> % rdg + counts	Remarks
Source mA	24 mA	0.001	0.015% + 2	V-max 30 V
Source mA and 21V	24 mA	0.001	0.015% + 2	R-max 650 Ω at 20 mA
Measure mA	24 mA	0.001	0.015% + 2	V-max 30 V
Measure mA and 21V	24 mA	0.001	0.015% + 2	R <sub>measure</sub> 15 Ω
Measure V	50 V	0.001	0.015% + 4	R <sub>measure</sub> 1 M Ω
Continuity	< 100 Ω			0.5 mA current

<sup>1</sup>Accuracy includes temperature effects 62°F to 80°F (17°C to 27°C). For use outside these limits add 0.015%/°F (0.003%/°C).

## Electrical

### Power Supply

4 x 1.5 V AA-size alkaline batteries (see certificate for type)

### Battery Life

60 hours in measure mode, 14 hours at 12 mA

### 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

220 Ω menu selectable loop resistor



## Environmental

### Calibration Reference

72°F (22°C) ±2°F(±3.6°C)/RH 45% ±15%

### Operating Temperature

14°F to 104°F (-10°C to 40°C)

### Relative Humidity

0% to 90% non-condensing

### Conformity

EN 61010, EN 61326-1:1997 + A1 (1998) + A2 (2001) + A3 (2003), CE marked

Certified for use in hazardous areas

ATEX: II 2G Ex ib IIC T4 (-10°C ≤ T<sub>a</sub> ≤ +40°C)

Certificate number Baseefa 06ATEX0224X

IEC: Ex ib IIC T4 (-10°C ≤ T<sub>a</sub> ≤ +40°C)

Certificate number IECEx BAS 06.0053X

## Physical

### Housing Material

High impact ABS

### Dimensions (w x h x d)

3.5 in x 5.5 in x 1.7 in (90 mm x 140 mm x 42 mm)

### Weight

16.2 oz (460 g) including batteries and leather case

### Display

Graphic LCD, 1.2 in x 2.1 in (31 mm x 54 mm)

### Electrical Terminals

Gold plated, 4 mm sockets

# UPS III IS Specifications

## Supplied As Standard

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

## Calibration Standards

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

## Related Products

### **Portable Field Calibrators**

A comprehensive range of portable pressure, temperature and electrical field calibrators

### **Laboratory and Workshop Instruments**

A comprehensive range of pressure indicators and controllers. Also included are pressure measurements industrial deadweight testers and GE Ruska high precision controllers and primary standard piston gauges.

### **Pressure Transducers and Transmitters**

A wide range of pressure transducers and transmitters including analog, digital and Hart/Smart devices. Please contact GE for further information.

## Ordering Information

### **Please state the following:**

- Model—UPS III IS



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