# 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. It measures 3.5 in  $\times$  5.5 in  $\times$  1.7 in (90 mm  $\times$  140 mm  $\times$  42 mm) and weighs 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.





# **Graphic Display**

The graphic display with menu-driven interface is easier to use than traditional knobs, switches, multifunction 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 seconds) 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  $\Omega$  loop resistor (menu selectable)

# EMC Compliance to EN 61326

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	$R_{measure}$ 15 $\Omega$
Measure V	50 V	0.001	0.015% + 4	R <sub>measure</sub> 1 MΩ
Continuity	< 100 Ω			0.5 mA current

 $<sup>^1\!</sup>$  Accuracy includes temperature effects 63°F to 81°F (17°C to 27°C). For use outside these limits add 0.015%/°F (0.003%/°C).

#### Electrical

#### **Power Supply**

 $4 \times 1.5 \text{ V}$  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  $\Omega$ "

#### **Out of Range**

Displays <<<< (under), >>> (over)

#### **HART Resistor**

220  $\Omega$  menu selectable loop resistor



#### Environmental

#### **Calibration Reference**

72°F (22°C) ±9°F(±5°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 61326:1997 + A1 (1998) + A2 (2001) + A3 (2003), CE marked Certified for use in hazardous areas ATEX: 1 I 2G Ex ib IIC T4 (-10°C $\leq$ Ta $\leq$ +40°C) Certificate number BASEEFA 06ATEX0224X IEC: Ex ib IIC T4 (-10°C $\leq$ Ta $\leq$ +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 Pressurements 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

