

# MPS 64

## Druck Multi Pressure Scanner

The GE Sensing MPS 64 Multi-Pressure System measures 64 differential pneumatic pressures and converts the measurements into digital data. It transmits the data in ARINC 429 format (High Speed) to the aircraft system.

### Features

- Small size with capability to make 64 pressure measurements at a 2 pulses per second sample data rate.
- High accuracy  $\pm 0,1\%$  FS, which meets applications requirements in aerodynamic and engine applications.
- Wide operating temperature:  $-55^{\circ}\text{C}$  to  $80^{\circ}\text{C}$
- Purging mode activated by electrical motor drive (no need to have a pressure source)
- Fully qualified for flight test application on civil and military aircraft and CE marked and ATEX approvals
- Additional option to increase sampling rate to 32 pulses per second



# Introduction

The MPS 64 automatically measures and processes the data and performs continuous self-checking.

The unit is contained in a metal case, which protects against temperature, vibration and EMC. Fixtures at each end of the Multi-Pressure System allow attachment of the unit to the mechanical frame.

An electrical connector is the interface for the connection of the RS 232 and Arinc 429 data systems, the power supply and self-checking status signals. Special micro-bore pipes from the aircraft systems fit over the protruding pressure connectors.

The MPSP 64 comprises a printed circuit board, pressure scanner unit with motorized valve and heaters assembled in an enclosure.

## Operating modes

The unit receives 3 input signals that change the mode of the unit.

- Blowing mode: where dry air is blown through the 64 Pressure ports to clean the pressure circuits.
- Measure Mode: where the 64 pressure ports to the corresponding pressure sensor. The analogue measures are then digitalized and send through the ARINC 429 bus.
- Calibration mode: where the zero of each transducer is measured and the results are stored in the memory.

# MPS 64 Specifications

## Pressure Range

- 1 bar diff (15 psi diff)
- 500 mbar diff (7.5 psi diff)
- 350 mbar diff (5 psi diff)
- 170 mbar diff (2.5 psi diff)
- 70 mbar diff (1 psi diff)
- 20 mbar diff (10" H<sub>2</sub>O)

## Temperature Range

-55°C to +80°C

## Accuracy

- Range  $\geq$  350 mbar:  $\pm 0.1\%$  FS (including Non-Linearity, Hysteresis, Repeatability and Temp. Effects)
- Range  $\leq$  170 mbar:  $\pm 0.125\%$  FS (including Non-Linearity, Hysteresis, Repeatability and Temp. Effects)

## Supply Voltage

18 to 36 Vdc

## Output

Arinc 429 or RS 485

## Shock and Acceleration

D0160 section 7 category C, D, E.

## Vibrations

MIL-STD 810F method 514

## EMC

D0160 D section 21 category M

## Safety

CE Marked  
ATEX: D0160 D chap 9 Cat E environment II

## Size x Weight

160 mm x 90 mm X 50 mm  
1.5 kg

# Supporting Services

GE Sensing supports the MPS 64. We offer extended warranty and multi-year service agreement alongside calibration, maintenance and pressure measurement training. These should be ordered as separate items. Further details of services can be found in [www.gesensing/productservices/.htm](http://www.gesensing/productservices/.htm)



[www.gesensing.com](http://www.gesensing.com)

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