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**Product Name:**Impulse Swirl Meter with Port Flow Rig and Display

Product Code: LBNY-0005-1650008



## **Description:**

A low range strain gauge transducer measures the positive or negative force caused by the torque reaction produced when swirling air is straightened by the honeycomb. This torque is normally calibrated over a small range for higher accuracy.

The display unit contains the signal conditioning electronics in a rack mounting module.

The front panel carries the 4 digit LED display, a main on/off switch and zero and span potentiometers. The rear panel connections include a 10V analog signal for connection to the data acquisition system.

The matrix is connected via a torque to a strain gauge transducer which is calibrated by suspending weights over pulleys either side of the torque arm.

The length of torque arm is such as to enable torque values up to 0.1Nm to be The unit shall be arranged for flow in an upward and downward direction and is supplied complete with adaptor plate having a pilot bore of diameter 50mm.

Swirl meter comprises a Honeycomb matrix mounted within cylindrical housing.

The dimensions of individual cell of the matrix being suitable for arresting the swirl of the incoming air Consists of a fabricated steel frame bench mounted on casters, which house the major components Control, instrumentation and data acquisition is mounted on the frame in one 3U high, 19 wide electronic rack enclosure. Intended for use with port models with a nominal free air capacity of 50 litres/second.

It is used for blowing or drawing air through the cylinder head port model. The mode of control may either be direct fan speed set point or by the test piece pressure drop set point. A variable speed centrifugal fan/blower unit, capable of 100mBar static pressure and a flow rate of 300m/hr, is attached to a base plate on the bottom level of the frame.

## **Technical Specification:**



## **Laboratory Instrument India**