

# LOOP POWERED LCD INDICATOR

JM-408

Intrinsically Safe Certified  
Ex [Ia]



## SPECIFICATIONS

<b>Model</b>	ASHE JM-408.
<b>Type</b>	Microcontroller based Digital Loop Powered Indicator.
<b>Principle</b>	Signal amplification and powering.
<b>Input Signal</b>	4 to 20 mA DC.
<b>Linearity</b>	0.1%.
<b>Calibration facility</b>	Zero and Span settings [external].
<b>Accuracy</b>	0.1%.
<b>Indication</b>	4-digit LCD display.
<b>Display height</b>	0.5".
<b>Forward voltage drop</b>	5.5 Volts @ 20 mA.
<b>Sensing resistance</b>	6.00 Ohms.
<b>Polarity</b>	Auto-sensing.
<b>Settings</b>	Zero, Span, Decimal point.
<b>Response Time</b>	Typically 75 mSec.
<b>Power Supply</b>	Nil (Loop powered).
<b>Calibration Range</b>	To be specified.
<b>Dimensions</b>	110 x 110 x 80 mm. [H x W x D].
<b>Execution</b>	Hazardous area installation. Enclosure: Explosion-proof Aluminium Alloy LM6, suitable for gas groups IIA/IIB, certified by CIMFR Dhanbad. Mounting accessories: 2" pipe mounting brackets and mounting chassis (optional).
<b>Weight</b>	Approximately 0.5 Kgs.
<b>Operating Temperature</b>	0 to 50 °C.

## OVERVIEW

The ASHE Model JM-408 Digital process Indicator is a compact, rugged and reliable indicating instrument which is specifically designed for accurate process measurement applications in areas without power availability.

The microcontroller based Indicator accepts an industrial standard current input signal of 4 to 20 mA DC and displays the actual process value calibrated in the desired units, on a linear scale. The process value is displayed on a 4-Digit seven-segment LCD digital display module. There is no necessity of any external Power Supply.

The instrument can be calibrated on any scale range from 9999 to +9999 units.

The Ashe JM-408 Indicator is therefore an ideal single unit substitute to conventional analog indicators because of its inherent accuracy in process control, besides other superior characteristics like total immunity to Shocks, Dust, Ambient temperatures, Humidity and Corrosive atmospheres. Its unique feature is that it is completely current loop-driven, eliminating the requirement of any external power supply source and associated cabling.

Further, the instrument is manufactured using selected high-grade components which guarantee its reliability and long operational life. The unit also has no moving parts, which greatly enhances its versatility.

## FEATURES

- No external power supply required.
- Standard 4 to 20 mA DC current loop powered operation
- Low Input impedance – negligible load on loop.
- High accuracy and linearity to input signal
- 4-digit displays
- Very low power consumption and heat dissipation
- Low forward voltage drop
- Auto-sensing polarity
- Selectable Decimal point
- 0.5" LCD display
- Front accessible Zero and Span calibration on membrane keypad
- Rugged, industrial grade Aluminium LM6 enclosure
- Compact and rugged execution
- Hazardous-area installation for IIA/IIB in IP65 execution
- Available in several dimensions
- Current limiting for I/O protection
- Proven record of several thousand installations
- Lifetime warranty on design and workmanship