DRESSER® NATURAL GAS SOLUTIONS

Dresser Meters & Instruments



Dresser Chatterbox-e+ Isolation Unit

Model 103 Opto-Isolation Unit

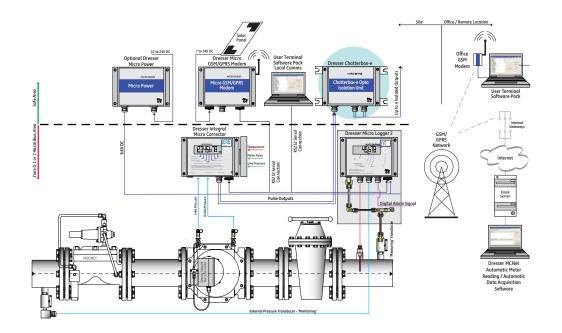
The Dresser Natural Gas Solutions (NGS) Chatterbox-e Isolation Unit provides the necessary safety isolation between equipment generating pulses in a hazardous area and non intrinsically safe equipment located in a safe area.

Opto-isolators provide four isolated volt-free contacts from low frequency pulses generated by gas meters or volume correctors installed in a hazardous area.

The Chatterbox-e Isolation Unit operates from a self-contained power supply lasting in excess of 10 years and is suitable for installation in remote and rugged environments without the need for an external power supply.

The unit consists of four independent circuits that transform high impedance pulses, or volt-free contact closures into isolated volt-free contact closures. One input can be connected to up to four isolated output circuits by using internal switches.

- 10 Year battery life from standard cells; two 1/2 AA lithium. "Virtual power for life"
- Four channels as standard
- · Channel selections via switches
- Two output glands as standard promotes ease of installation when more than one system is to be connected to the Chatterbox-e
- ATEX Certified Intrinsic Safety
- Weatherproof cast aluminum housing rated to IP66 (equivalent to NEMA 4x) offers flexibility of installation
- Compliance to UK Institute of Gas Engineers Editions 1 & 2 "Electrical Connections to Gas Meters" and USA Article 500 of the National Electrical Code, ANSI/NFPA-70 (NEC)"
- Opto-isolation increases reliability and reduces power consumption
- Simple mechanical and electrical installation
- Single or multiple outputs from single input
- Output terminals are not polarity sensitive, ensuring correct operation regardless of connection polarity.
- No corrector or meter setting required. As soon as the Chatterbox-e receives a pulse, a 220ms isolated output pulse is generated



Inputs

Each input is designed to interface with the current 'sinking' pulse outputs from the Dresser NGS Micro Corrector. The input will also interface directly with a volt-free contact closure, i.e., directly to a gas meter. Contact debouncing as standard.

Outputs

Each output is a 220ms pulse, current sinking output capable of accepting up to 30V, 130mA.

Enclosure

Weatherproof aluminum enclosure IP66 (equivalent to: NEMA 4x) rated suitable for wall or panel mounting. Size: 160mm wide x 120mm high over glands x 62mm deep.

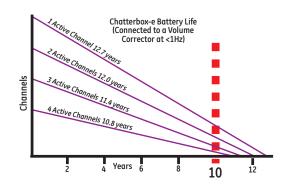
Intrinsic Safety

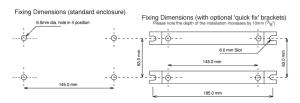
Baseefa 03ATEX0429 @ II (1)G [Ex ia Ga] IIC

The Chatterbox-e must be installed in a safe area and is suitable for connection to equipment in hazardous areas Zone 0, 1 or 2.

Power Supply

Two 1/2AA lithium cells giving an estimated life in excess of 10 years based on all four channels operating and an input frequency of <1 Hz from a volume converter.





Natural Gas Solutions (UK) Limited

201 Mere Grange Leaside St Helens Merseyside, UK WA9 5XH

T: +44 (0) 3330 164 360 E: ngs.uk@dresserngs.com

