

Dresser Chatterbox-e Isolation Unit



The Chatterbox-e provides safety isolation between equipment generating pulses in the hazardous area and non intrinsically safe equipment located in the safe area.

Opto - isolators provide four isolated volt-free contacts from low frequency pulses generated by meters, pulsers or correctors installed in the hazardous area.

Chatterbox-e operates from a self contained power supply and is suitable for installation in remote and environments without the need for an external power supply.

The unit has 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 4 isolated output circuits by using internal switches.

- 10 Year battery life from two 1/2 AA lithium cells.
- Standard four channels
- Channel selections via switches on the circuit board
- Standard two output connectors
- Certified Intrinsically Safe
- Weatherproof cast aluminum NEMA 4X
- Compliance to 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
- No Corrector or Meter setting required; as soon as the Chatterbox-e receives an input pulse, a 220ms isolated output pulse is generated

INPUTS

Each input is designed to interface with the current 'sinking' pulse outputs of the ROOTS® Micro Corrector to a maximum of 7.4V. The input will also interface directly with a volt-free contact closure, i.e., directly to a gas meter. Contact de-bouncing as standard.

OUTPUTS

Each output is a 220ms pulse, current sinking output capable of accepting up to 20V, 130mA.

ENCLOSURE

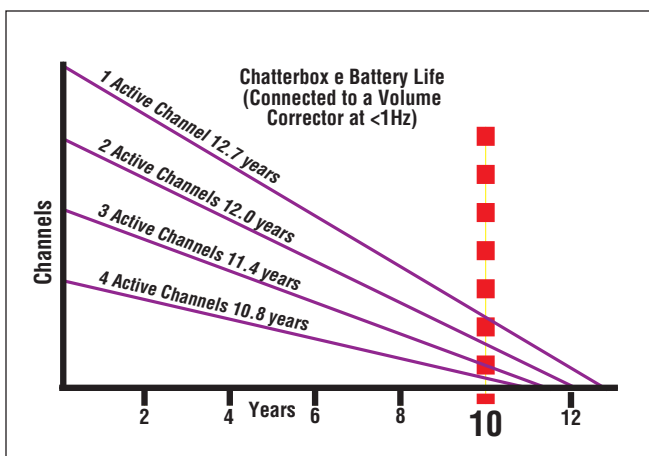
Weatherproof aluminum enclosure NEMA 4X rated. Size: 6.4" width, 4.8" height x 2.5" depth.

INTRINSIC SAFETY

BASEEFA 05 ATEX 0429 II(1) G [EEx ia] IIC. The Chatterbox-e must be installed in the safe area and is suitable for connection to equipment in hazardous areas Class 1 Division 1, Groups C and D.

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.



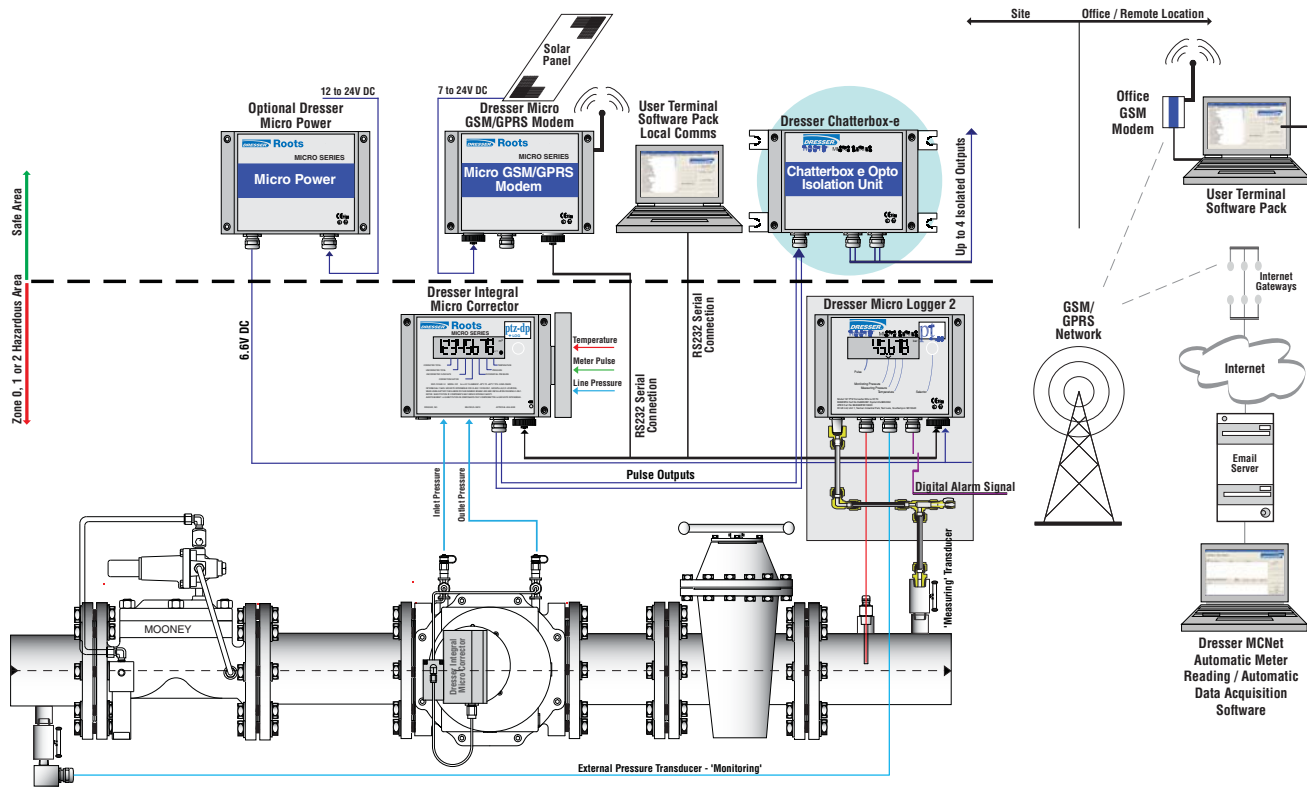


Figure 1 Systems Schematic