

# Dresser\* Micro Corrector - MID - MC2

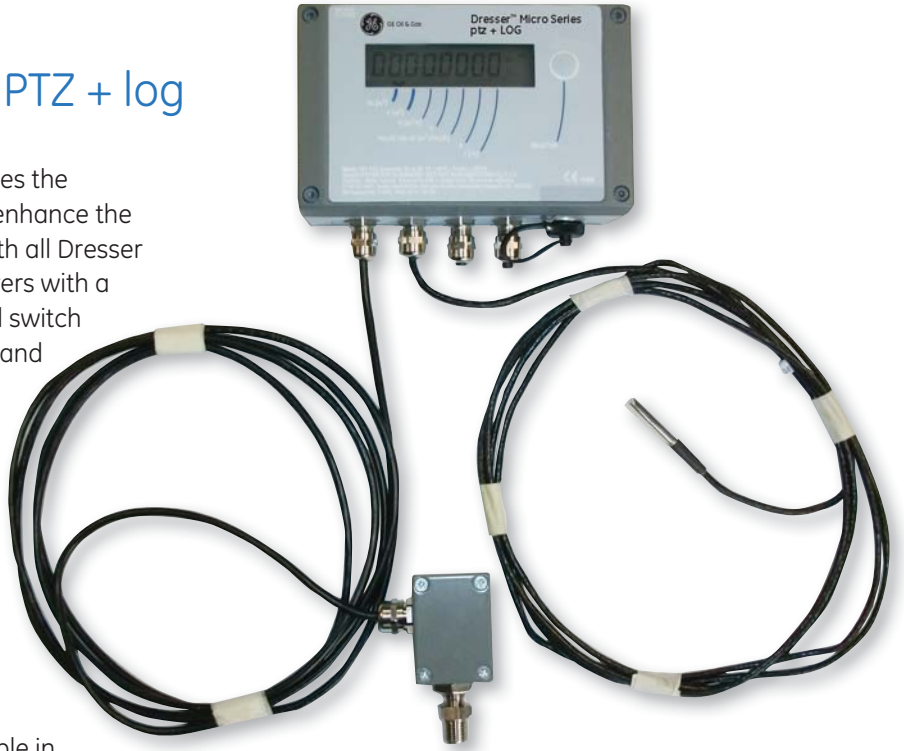
Models T + log, PT + log, PTZ + log

This MID version Micro Corrector (MC2) takes the proven MC platform and adds features to enhance the user experience. The MC2 is compatible with all Dresser meters and meters from other manufacturers with a low frequency pulse output, such as a reed switch or Weigand pulser. The MC2 also has data and audit logging capabilities.

The Dresser Micro Corrector - MID - MC2 functions as a wall mount corrector. It can also function as an economical pressure and/or temperature recorder. The MC2 is rated for Zone 0 hazardous locations.

## Features

- 1 to 3 data logs provide for years of historical information and are configurable in increments from 1 minute to 1 month.
- Audit Log maintains a record of configuration and calibration changes.
- Available with your choice of lithium or alkaline sealed battery pack.
- Alarm and fault activity is displayed in the data log and audit log reports.
- E<sup>2</sup>PROM provides non-volatile storage of recorded data and corrector configuration, regardless of battery condition.
- Data logs are saved in .CSV format which allow manipulation and sharing of information via MS Excel<sup>®</sup> formatted reports.



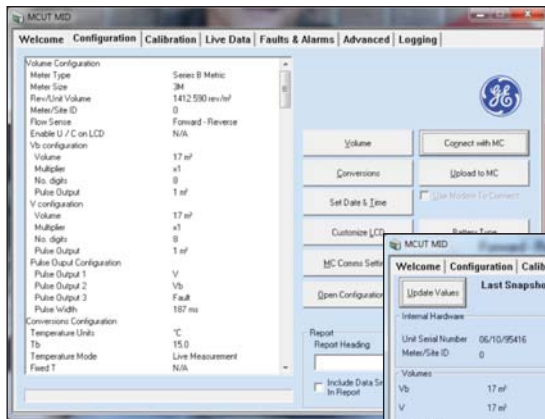
Dresser Micro Corrector, MID - M2 Model ptz + LOG

- Simple user terminal software allows for ease of configuration, calibration and data downloads.
  - Set up\*\*
  - Calibration \*\*
  - Data extraction
  - Alarm monitoring

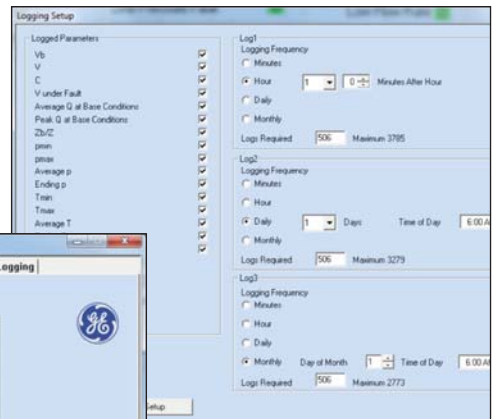
\*\* Disabled when the metrological seal is in place, it is only possible to activate by breaking the seal; this will negate the MID certification. If the metrological seal is not utilized, password protection is MID approved for all parameters other than volume registers.

- Gas constituent parameters can be updated via password protection.
- Live data screen allows you to query the corrector either serially or via a modem to see the current conditions at the meter site, including a real time display of the corrector's battery pack voltage.





Configuring the MC2



Downloading data logs



Live data screen

## Available Pressure Transducers

Micro Correctors fitted with pressure transducers are available with absolute transducers in the following ranges: 0.8 -2, 2-12 and 5-70 bar.

### Battery - Alkaline

Sealed Pack	5-years nominal life
Low Battery Reserve	6-months approximately

### Battery - Lithium

Sealed Pack	15-years nominal life
Low Battery Reserve	1.5-years

### Accuracy

Operating Temperature Range	-25 °C to 55 °C
Line Pressure	0.4% reading
Line Temperature	0.5 °C

### E<sup>2</sup>PROM Data Log Memory

**Time-stamped Entries** up to 32161 (depending on the number of Parameters logged)

### Certification

EC-type	Examination Certificate Number BAS 98 ATEX 1083X
EC-type	Examination Certificate Number NMI T10332

In accordance with:

European Directives: 94/9/EC and 2004/22/EC  
Standards: EN 12405-1/A1, EN 61000-4-2,  
EN 61000-4-3, EN 61000-4-4 and EN 61000-4-6

## Inputs

### Volume

#### Wall Mount

From a mechanical reed switch or Weigand sensor, compatible with all Dresser low frequency pulsers, with a maximum frequency of less than 2 Hz at Qmax

#### Pressure

Proprietary semiconductor strain gauge

#### Temperature

ITS-90 Platinum 100Ω RTD = 0.00385

### LCD

All selected parameters

### LCD Resolution

Pressure	1 mbar 10 mbar for 70 bar A FS
Temperature	0.1 °C

### 3 Fully Programmable Pulse Outputs

Corrected, Uncorrected, and Alarm/Fault	
Loop Voltage	5-15 VDC
Loop Current	10 mA maximum
Pulse Width	62.5, 125, 187, or 312 ms
Switch off Resistance	> 2 Mohms
Switch on Resistance	<10 ohms
Isolation	2,500 VDC
Environment	
Classes	M2/E2
Operating Temperature	-25 °C to 55 °C
Storage Temperature	-50 °C to 80 °C
Humidity	0 to 95% sustained outdoor exposure
Enclosure	
IP66 (NEMA 4X)	
Intrinsic Safety	
Zone 0, 1 and 2	EX ia IIC T4 (-40°C < T amb < 60° C) BAS98ATEX 1083X, Ex 98 E2082
Electromagnetic/Radio Frequency Immunity	
FCC Class B	Meets EMI/RFI immunity at 10 V/m, 0.1 to 1,000 MHz EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-6,
Other	
ISO-9001, CE Mark	
Battery Packs	
Sealed Alkaline Pack - P/N AB 009	
Sealed Lithium Pack - P/N AB 013	

### Ordering

For T, PT and PTZ versions:

- Pressure sensor connection located on instrument chassis or pressure sensor available on 3m or 6m cable. Cabled versions have the option of flexible stainless steel armoured sleeving.
- Temperature probe available on 3m or 6m cable lengths with optional flexible stainless steel armoured sleeving. Temperature probe is housed in a stainless steel probe body 50mm x 6.0mm diameter and the probe head is 25mm x 4mm diameter. An armoured cable option is also available; this is housed in a stainless steel probe body 82mm x 6.0mm diameter and the probe head is 56mm x 4mm diameter.
- A sealed battery pack is included and will provide a nominal five years of reliable corrector operation.

- Gas parameter values are to be supplied by the customer prior to final calibration check and MID sealing. A detailed calibration certificate is supplied with each instrument.
- Optional piping kits are available for convenient connection of external pressure connections. We offer piping kits with various lengths of stainless steel tubing and two different pressure ratings.

### Pressure Piping Kits

	Approved for use to 23 bar	Approved for use to 100 bar
Length of SS Tubing	Part Number	Part Number
0.8 m	051416-320	051416-310
2.1 m	051416-420	051416-410
3 m	051416-520	051416-510

- New users may want to order the user terminal software and one or more communication cables to allow for local configuration, calibration, and data log retrieval.

### Communication Cables

PC (Serial) to IMC	
Length of Cable	Part Number
2 m	AW 169
8 m	AW 198
20 m	AW 233
PC (USB) to IMC	
2 m	AW 220

Available Compression Calculations (Z)
AGA8 Gross Compressibility (GCM1) Method 1
AGA8 Gross Compressibility (GCM2) Method 2
SGERG 88 Method 1
SGERG 88 Method 2
SGERG 88 Method 3
SGERG 88 Method 4
NX19 Low Calorific Gases
NX 19 High Calorific Gases
Fixed value of Supercompressibility Factor



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