





# Integral Volume Correction Differential Pressure (DP) Monitoring

Versions: ptz-dp + LOG, T-dp + LOG, ptz + LOG, P + LOG, and T + LOG

Dresser Measurement offers an integrated solution, the Dresser US Differential Pressure (DP) Micro Corrector, which monitors meter health by continuous measurement of the differential pressure drop across the meter. The Dresser Micro Corrector DP is capable of learning the differential pressure curve for an individual meter. During the learning period, DP is monitored using typical values from preprogrammed DP reference curves.

The Dresser Micro Corrector DP retains the last valid average differential pressure measurement on the LCD of the corrector along with the date when this occurred. It also displays the average line pressure, average line temperature and meter flow rate for that same date. The differential pressure test information required to be in compliance with state Public Utility Commission (PUC) requirements is available with the push of a button.

This offers operating efficiencies as the number of return trips to the meter set is reduced, and reduces the need for venting gas during periods of low consumption. Differential pressure test results are also logged in the data logs.

Developed from the proven IMCW platform, the Dresser Micro Corrector provides volume correction through a simple-to-use interface. Features such as improved low flow accuracy, enhanced data logging capability, and reduced accuracy test times combine to offer a complete solution to major customers.

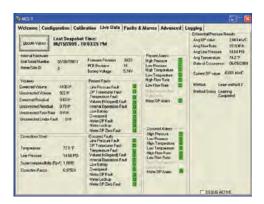
The Dresser Micro Corrector, model IMCW2, is an integral corrector rated for Division 1 hazardous locations by the Canadian Standards Association (CSA) and ATEX.

### Remote Communications

Save money by reducing the number of site visits, truck rolls and your carbon footprint with Dresser's IMCW2 Micro Corrector. With the support of AUTOSOL's ACM 8.0 and Itron's MV-90, you can remotely monitor your meter's health with real-time data delivery for a complete solution for offsite communications; ultimately saving you money every day.

#### **Features**

- · Monitors meter health
- Reduces unnecessary scheduled maintenance
- Aids in regulatory compliance of DP testing, where applicable
- Last valid DP measurement displayed on LCD and live data screen



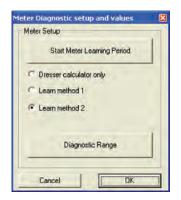
Live data screen displays current DP read, as well as last valid DP read, pressure, temperature and flow rate with date of occurrence.

### **Features**

- Real-time differential pressure measurement
- Compatible with Dresser Series A (LMMA), Series B, and Romet meters
- DP measurement is independent of volume correction
- dp + LOG units feature faults for high DP and meter lock-up
- Rotating index offers ease of meter reading, especially in non-typical installations
- Uncorrected instantaneous flow rate displayed on LCD can help meter differential testing in the field
- Autosol ACM 8.0 compatibility
- Itron MV90 xi compatibility

## Maximum uncorrected peak flow also displayed on LCD

- The SmartProve\* Interface reduces meter and corrector test times by as much as 90%, and allows the meter and corrector to be tested as a complete measurement system.
- User selectable trim table improves rotary meter accuracy at flow rates less than 10% of meter Qmax
- Micro Generator\* adds years to main battery life, extending the interval between battery changes
- User terminal software allows for configuration, calibration and data log downloads
- 1 to 3 data logs provide for years of historical information and are configurable in increments from



Learning methods are customer selectable in the user terminal software.

1 minute to 1 month; data logs include the option to log live battery voltage

- Audit log maintains a record of configuration and calibration changes
- Available with your choice of sealed alkaline or lithium battery pack
- Alarms notify the user of over-range conditions for pressure, temperature, and flow rate
- On units with DP transducer installed, alarms are present for higher than normal differential pressure
- Alarm and fault activity is displayed in the data log and audit log reports, and the live data screen
- E2PROM provides non-volatile storage of recorded data and corrector configuration regardless of battery condition
- Uncorrected volume under fault register in E2PROM replicates a backup mechanical index
- Microsoft Excel® formatted reports allow for manipulation and sharing of information





Micro Generator

0.0 .5 1.0 1.5 2.0 2.5 3.0 3.5 5.0 4.5 5.0 5.5

102

103

104

105

107

Accuracy Curve

Trim Table Dresser SmartProve Interface

Rate-mcfh At Inlet Conditions

### For PTZ and T versions

- All 23M 56M high capacity meters, and high pressure meters require an external temperature probe and thermowell. The probes are available with 5 ft or 10 ft armored cables and in 2" or 8-1/2" in insertion lengths
- Thermowells are available in sizes 1/4-NPT x 2, 1-NPT x 2, 1-NPT x 4, and 1-NPT x 6; all dimensions are in inches

### A variety of pulse output connectors are available

- Metal 6-pin circular twist lock connectors
- Plastic cable-gland connectors
- Conduit fittings and other special connectors are available upon request

The IMCW2 will be shipped with a factory standard configuration unless the customer specifies otherwise.

A sealed battery pack is included and provides a nominal five years of reliable corrector operation. Adding the optional Micro Generator may extend battery life to seven years or more.

New users will want to order the user terminal software and one or more communication cables to allow local configuration, calibration, and data retrieval. The cables are available in 6, 25, and 50 ft. lengths. Special cables are available for proving the meter and corrector with the Dresser Model-5 Transfer Prover.







Conduit Plug



Conduit with Cable



Cable Gland no cable



Cable Gland with cable

### Communication Cables

PC (Serial) to IMC					
Length of Cable	Part Number				
6.6'	057135-001				
25′	057135-002				
50′	057135-003				
PC (USB) to IMC					
6.4′	060506-000				

Log Number	Date	Time	Avg DP Value	Avg Flow Rate	Avg Line Pressure	Avg Line Temperature
Reference DP Logs			in WC	ft³/h	PSI	°F
1	10/12/2015	11:26:50 AM	0.462	3755	8.146	87.13
2	10/13/2015	9:54:50 AM	0.315	3342	8.153	85.64
3	10/14/2015	10:26:20 AM	0.223	2516	8.145	86.07
4	10/15/2015	9:47:50 AM	0.300	3233	8.165	84.38
5	10/16/2015	10:14:50 AM	0.538	3813	8.150	84.65
6	10/17/2015	10:20:20 AM	0.477	3829	8.133	85.36
7	10/18/2015	10:27:50 AM	0.297	3211	8.128	87.09
8	10/19/2015	9:44:50 AM	0.388	3484	8.143	84.62
9	10/20/2015	9:43:20 AM	0.356	3470	8.141	84.34
10	10/21/2015	9:42:50 AM	0.427	3384	8.144	84.34
Current DP Logs						
26	03/05/2016	9:49:20 AM	0.302	3599	8.350	66.12
27	03/06/2016	9:46:20 AM	0.357	3567	8.399	66.08
28	03/07/2016	10:11:50 AM	0.265	3645	8.370	68.31
29	03/08/2016	9:57:20 AM	0.273	3548	8.345	67.49
30	03/09/2016	10:03:20 AM	0.307	3530	8.347	67.02
31	03/10/2016	10:01:20 AM	0.283	3409	8.395	68.08
32	03/11/2016	9:38:50 AM	0.270	3252	8.401	67.61
33	03/12/2016	10:17:50 AM	0.102	2440	8.341	69.49
34	03/13/2016	9:52:50 AM	0.310	3683	8.353	68.04
35	03/14/2016	9:55:20 AM	0.285	3419	8.360	67.45
36	03/15/2016	10:03:20 AM	0.289	3429	8.375	68.31

#### **Dresser Measurement**

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