Appendix B. Glossary

ABBREVIATIONS

DMM	Digital Multi-Meter.
DR	The difference between two resistance values.
DT	The difference between two temperature values.
DV	The difference between two voltage values.
ESD	Electro-Static Discharge.
EXC	Excitation wire.
FCI	Fluid Components Intl
F.S.	Full Scale.
IOP	Input/Output/Power supply.
MSDS	Material Safety Data Sheet.
NC	Normally Closed.
NO	Normally Open.
RA	Return Authorization.
RTD	Resistance Temperature Detector. It operates on the principle of change in resistance as a function of temperature.
SEN	Sense wire.
STP	Standard Temperature and Pressure.

EXPLANATION OF TERMS USED IN THE DISPLAY MENU / DELTA R DATA SHEET

The terms are shown in the order they are displayed through out the display menu.

Totalizer Setup 3.3	Menu Function
m	Abbreviation for thousand
mm	Abbreviation for million
Verify 5.1	Menu Function
Flow Factor	The multiplier that converts the internal flow rate to the user selected flow units
Units	Customers Requested Flow Rate unit
Flow Range	The minimum and maximum of the measurable flow

Area	Cross-sectional area of pipe or duct
Diameter	Inner diameter of pipe
Temp. Unit	Unit of temperature
Tcal Add	A value that is added to measured temperature (default is 0)
Tcal Mult	A value that is multiplied by the measured temperature (default is 1)
Relay 1	Current status of Relay 1, energized or de-energized
Above, Below, Inside or Outside	See Chapter 3 Relays, for the explanation
H:	Hysteresis value (in flow rate units such as 50 SCFM etc.)
D:	Delay in seconds
Relay 2	Current status of Relay 2, energized or de-energized
Port 1	Channel 1 output signal
Mode	Current (4 - 20 mA) or Volts (0 - 5, 0 - 10, etc.) output
F.S.	Full Scale: 100% of flow rate
Zero	0.00 for zero based and Min flow for non-zero based
Port 2	Channel 2 output signal
Corr1 through Corr4	Correction Factors: Default is Corr 2 = 1 and Corr1, 3, 4 = 0 (Flow) = Corr1 + Corr2(Flow) + Corr3(Flow)^2 + Corr4(Flow)^3
Menu 5.8	Menu Function
dR gain	Digital representation of A/D# for DR value - derived during front-end set-up: DR = dR Gain X A/D# + dR Off
R gain	Digital representation of A/D# for REF RTD value - derived during front-end setup: REF R = R Gain X A/D# + R Off
dR Off	Offset value of equation: DR = dR Gain X A/D# + dR Off
Ref off	Offset/constant value for REF RTD derived during front-end set-up: REF R = R Gain X A/D/# + R Off
Offset 1	Offset for equation: REF R = R Gain X A/D# + R Off
Slope 1	Slope for equation: D/A# = current X Slope 1 + Off 1. Corresponding to current or voltage output
Offset 2	Offset for equation: REF R = R Gain X A/D# + R Off
Slope 2	Slope for equation: D/A# = current X Slope 2 + Off 2. Corresponding to current or voltage output

Std. Density Density of media (customer's original request) at standard conditions usually at 14.7 PSIA and 70 degrees F: used by firmware for conversion when a mass flow rate unit is chosen such as LB/HR etc.

Tot. Unit Unit of Totalizer as NCM or SCF: Note that there is no time unit

Prt B: Port B

Prt C: Port C

A/D Mode Analog to Digital Mode

Boxcar A number between 1 - 64 that represents a signal filtering parameter. See Chapter 3, Sample Rate

Link Mode Shows if link mode is enabled or disabled

Flow Min Minimum calibrated Flow Rate in SFPS

Flow Max Maximum calibrated Flow Rate in SFPS

dR Min dR value low end cutoff. Should be set to approximately 5 ohms less than the lowest dR corresponding to Flow Max

dR Max dR value high-end cut-off. Should be set to approximately 5 ohms greater than the dR corresponding to Flow Min

C1 - C5 Coefficients for Characteristic Equation; unique to each probe:
$\ln(\text{Flow}) = C_1 + C_2\ln(DR) + C_3\ln(DR)^2 + C_4\ln(DR)^3 + C_5\ln(DR)^4$

CAL REF W Calibration Average Reference Resistance

T1 Temperature Compensation coefficients

T2 Serial number of unit

T3 Shop Order number of unit

T4 Engineering serial number - if any

The following terms are miscellaneous terms to know:

Full Scale This is the value that the customer chooses to set the 20mA (or 10 VDC) output to. The Max Flow value, by comparison, is the highest flow, in SFPS, that the meter was calibrated to. This value is in the customers units

Power Isolated Input AC power terminals are electrically isolated from all other terminals

Turndown This is Full Scale divided by the Min Flow