# **DL76**



# DATA LOGGER SYSTEM INSTRUCTIONS





#### **GENERAL INFORMATION**

The DL76 is a battery-powered data logger that can be used with any Seametrics flowmeter. It stores pulses for up to 3 years, depending on the user-selected frequency of reading. Indicator lights on the unit flash to indicate when it is functioning and when the battery is low.

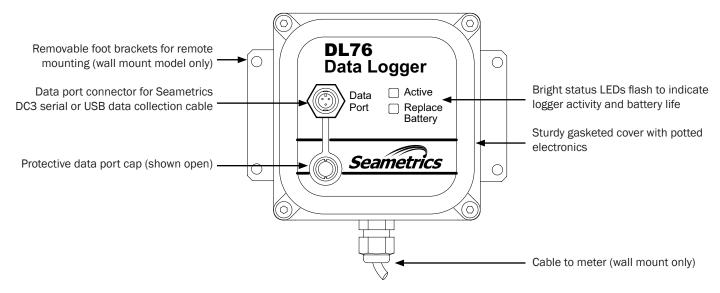
The DL76 can be factory-mounted on the meter or remotely mounted. Housings are rugged cast aluminum, gasketed for environmental protection.

When a DL76 logger is placed into operation, it is easily set up using a laptop computer. Data is also retrieved from the DL76 by means of a laptop and can be analyzed on the laptop or easily loaded on a desktop computer for analysis.

**FlowInspector software (ordered separately) is required** for the downloading, storing, viewing, graphing, charting and printing of data in several formats.

FlowInspector requires a PC with Windows 98, NT, 2000, XP, Vista, or Windows 7; CD-Rom drive; 800 x 600 screen resolution; serial port or USB/serial adapter; and a Seametrics DC3 data cable. FlowInspector comes in versions compatible with up to 4, up to 16, or 17+ dataloggers.

#### **FEATURES**



#### **SPECIFICATIONS\***

Power		Size C 3.6 Vdc lithi	Size C 3.6 Vdc lithium battery (included)			
Battery Life		Estimated life is 3-	Estimated life is 3-5 years depending on usage.			
Temperature		0° to 130° F (-18°	0° to 130° F (-18° to 54°C)			
Rate Units	Volume	mL, liter, gallon, Im	mL, liter, gallon, Imperial gallon, cubic foot, cubic meter, million gallon			
	Time	Seconds, minutes,	Seconds, minutes, hours, days			
Total Units		, , ,	Liter, gallon, Imperial gallon, cubic foot, cubic meter, million gallon, acre-foot, acre-inch, megaliter, thousand-gallon			
Data Storage Cap	pacity	Capacity	at	Sampling Interval		
		11 days	at	15 seconds		
		22 days	at	30 seconds		
		44 days	at	60 seconds		
		6 months	at	240 seconds		
		1 year	at	480 seconds		
		3 years	at	1450 seconds		
Maximum Input F	requency	500 Hz				
Indicators	ndicators Low batte			attery; Power		
Memory Wraparound		Selectable options	Selectable options (Stop or Overwrite)			
Clock Accuracy		10 minutes/month	10 minutes/month (.02%)			

<sup>\*</sup>Specifications subject to change • Please consult our website for current data (www.Seametrics.com).

#### **MOUNTING**

There are three mounting configurations for a DL76: Meter mount for mechanical meters, meter mount for insertion magmeters, and wall mount (DL76W). The meter mount models match up to any Seametrics lower square housing. All configurations can be factory-ordered or field-installed. Converting from one mounting configuration to another requires use of MK10 or MK20 mounting kits.

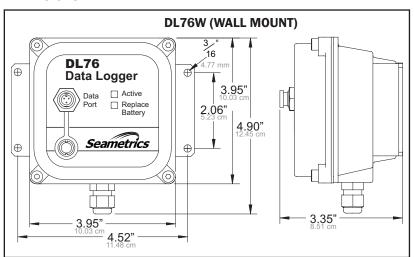
**Meter Mounting.** Remove the four screws on the meter cover with a 5/32" Allen wrench. After connecting the leads to their respective terminals (see diagram), put the DL76 in place of the meter cover and tighten the screws evenly. The gasket on the DL76 should be visibly compressed by tightening all around.

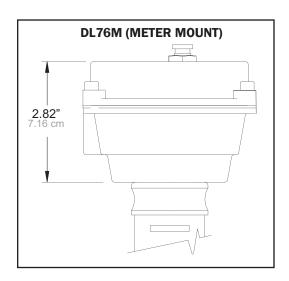
#### **OPERATION**

Seametrics FlowInspector V.2 software is required for operation of the DL76. Please consult your FlowInspector manual for instructions in loading the software onto your

computer, setting up your DL76 for use, downloading, storing, and analyzing your data.

#### **DIMENSIONS**



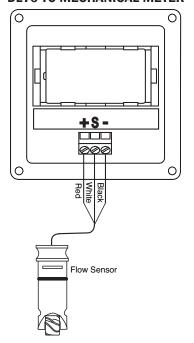


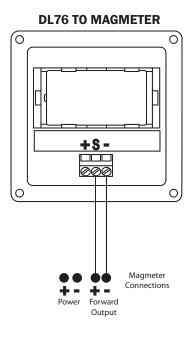
# **CONNECTIONS** (see also next page)



**Caution:** Do not apply external power to the DL76

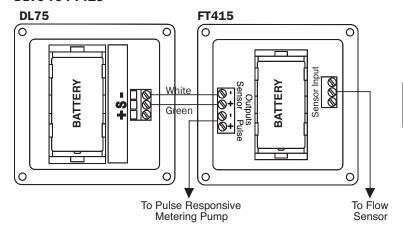
### **DL76 TO MECHANICAL METER**





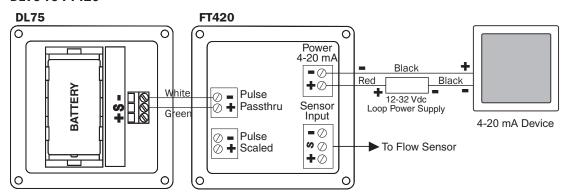
Page 3

#### **DL76 TO FT415**



Caution: Do not apply external power to the DL76

#### **DL76 TO FT420**



## **TROUBLESHOOTING**

Problem	Probable Cause	Try				
Laptop screen reads "No connection" and "Active" light is NOT blinking	DL76 is transmitting data. Wait two minutes before taking action.	Wait for "Active" light to blink				
tive light is NOT billikilig	Dead battery in DL76	Replace battery				
Laptop screen reads	Loose cable	Tighten cable				
"No connection," but "Ac- tive" light <u>IS</u> blinking	Bad cable	Test cable (tech bulletin "DL75/76: Testing the DC3 Serial Cable" on Downloads page at www.Seametrics.com)				
Flow rate incorrect	K-factor setting is incorrect	Make sure K-factor in DL76 matches flow sensor				
No flow rate	Damaged flow sensor	Mechanical: See if rotor spins freely EX Magmeter: See if "Status LED" indicator is blinking				
	Broken wire	Check for flow rate				

