

Isco 676 Rainfall Logging System

The Isco 676 Rainfall Logging System uses a tipping bucket rain gauge with precision sapphire bearings for accurate rainfall measurement. It has an 8-inch diameter orifice and is factory-calibrated to tip at either 0.01 inch or 0.1 mm of rainfall. The separate data logging module is based on the proven 4100 Series Logger platform.

Applications

- ◆ cMOM and CSO/SSO programs (Sewer overflow monitoring and prevention)
- ◆ TMDL and Watershed surveys
- ◆ Inflow and infiltration studies
- ◆ General rainfall measurement



The separate rain gauge and logger allow great flexibility in setting up for a wide range of monitoring site requirements.



Standard Features

- ◆ Three-point leveling and integral bubble level make it easy to align the rain gauge for maximum accuracy.
- ◆ Sapphire jewel bearings on the tipping bucket are spring-loaded to prevent damage to the bearings and ensure consistent operation over a wide temperature range.
- ◆ Screens cover all openings to prevent leaves, insects, and other debris from clogging the gauge.
- ◆ Included 50-foot cable connects rain gauge and data logger, allowing logger to be positioned for convenient data retrieval.
- ◆ High data logging capacity and long battery life enable extended deployment and reduce the need for frequent site visits.
- ◆ Sampler triggering based on programmed rainfall conditions.
- ◆ Optional phone modem enables remote voice-message alarms, and data retrieval using Flowlink software.

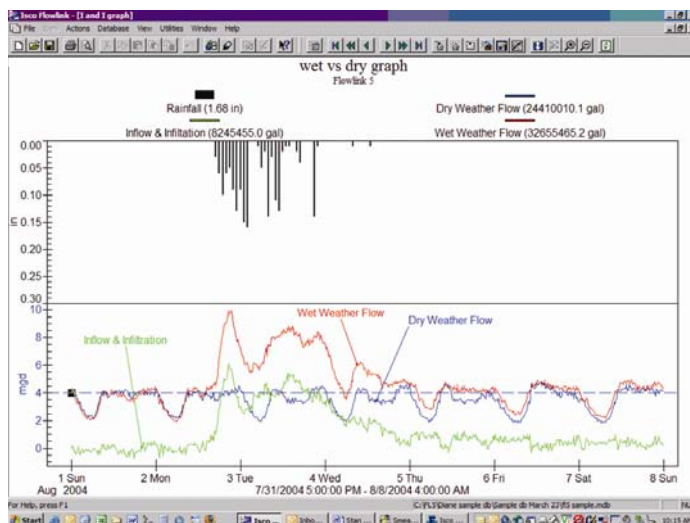
Specifications: Isco 676 Rainfall logging system

674 Rain Gauge	
Type:	Tipping bucket
Connect cable:	50 ft. (15.2 m), 2 conductor with 4-pin plug
Bearings:	Spring-loaded sapphire jewel
Orifice Diameter:	8 in. (20 cm)
Sensitivity:	English - 0.01 inch; Metric 0.1 mm
Accuracy:	English - $\pm 1\%$ at 2 in/hour; +3%/-4% up to 5 in/hour Metric - $\pm 1.5\%$ at 5 cm/hour; +3.5%/-9% up to 13 cm/hour
Capacity:	English - 22 inches/hour Metric - 38 cm/hour
Output Signal:	Contact closure of at least 50 millisecond duration
Switch Type:	Hermetically sealed magnetic proximity switch. Normally open, 200V DC, 0.5 A maximum.
Height:	13 in. (33 cm)
Diameter:	9.5 in. (24 cm) (at mounting base)
Weight:	10 lbs. (4.5 kg)
Operating Temperature:	32° to 140°F (0° to 60°C)
Storage Temperature:	-40° to 140°F (-40° to 60°C)

4100 Data Logger	
Size:	10.5 x 9.0 x 6.0 in (26.7 x 22.9 x 15.2 cm)
Weight:	8.0 lbs (3.6 kg) (without batteries)
Material:	Body and battery end are structural foam molded polystyrene. Connector end is Ryton® (polyphenylene sulfide).
Enclosure:	NEMA 4X, 6 (IP67)
Operating temperature:	0° to 140°F (-18° to 60°C)
Storage temperature:	-40° to 140° (-40° to 60° C)
Power:	Two 6 volt lantern batteries (alkaline recommended) or one rechargeable 12 volt Isco 947 Lead Acid Battery
Data Storage:	230,000 bytes, programmable to operate in rollover or slate mode
Storage interval:	1, 2, 5, 10, 15, 30, 60, or 120 minute, selectable
Typical battery life (with Alkaline lantern batteries):	2 years with 1-hour data-storage interval; 6 months with 15-minute storage interval
Program memory:	Non-volatile, programmable flash; can be updated via Interrogator port without opening enclosure
Software:	Isco Flowlink for data retrieval and analysis
Communication:	Serial connection to computer with Isco Flowlink Software; 300, 1200, 2400, 4800, or 9600 bps

Ordering Information

Description	Part Number
676 Rainfall Logging System. Includes rain gauge, data logging module, and 50 ft (15 m) cable English - Tips every 0.01 inch of rainfall Metric - Tips every 0.1 mm of rainfall	 68-3280-002 68-3280-003
Flowlink Software	68-2540-200
Interrogator cable (for laptop PC with 9-pin serial port)	60-2544-044



Isco Flowlink software makes it easy to analyze rainfall in combination with flow data from multiple sites within a monitoring project.



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