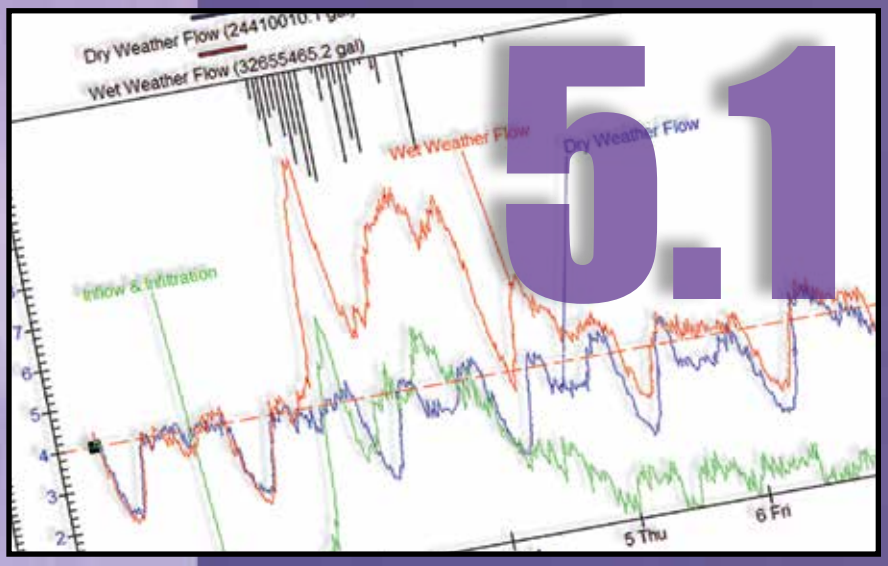
ISCO®

Flowlink®



5.1

The software solution to complete your flow monitoring program

Flowlink 5.1 software is the central point of your flow data management program. With this software you can:

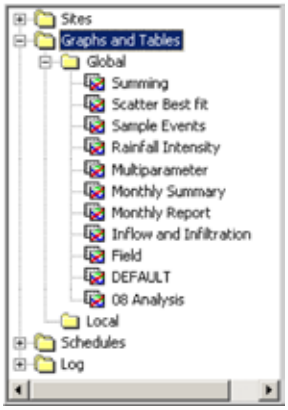
- Configure Isco equipment on-site for operation and data logging
- Retrieve data from on-site equipment
- Prepare graphical and tabular reports of flow monitoring data
- Perform advanced analysis for stormwater, WWTP, and collection system studies
- Archive data for your organization's retention plan
- Automate repetitive tasks

Overview and Benefits

For the Office and the Field

Teledyne Isco designed Flowlink 5.1 software for the desktop computer in the office and for notebook computers in the field. Flowlink software assists technicians in the field with instrument configuration, equipment maintenance, and data collection. Keyboard shortcuts simplify common on-site tasks — F11 (quick connect), F8 (retrieve data), F7 (disconnect). The F3 (Quick Graph) shortcut displays a graph for a quick assessment of site conditions.

Back at the office, Flowlink 5.1 software aggregates the flow data for reports, analysis, and archiving. When on-site instrumentation is equipped with communication modules, Flowlink software at the office can eliminate many site visits by remotely connecting with the site to collect data, monitor battery levels, and evaluate channel conditions.



One Easy Application

Maintaining complex flow monitoring projects need not be difficult or scattered among several computer applications. Sites and their data, as well as graphs, tables and automated schedules, all appear in Flowlink software's workspace. The workspace gives you quick access to all of your flow data resources in a consistent, easy-to-use window. The software includes powerful graphing and data analysis tools — no longer will you need to export data to spreadsheets or write macros.

With Flowlink 5.1 software, you can reuse many elements to save time and simplify your work. You can use a graph of one site's data as a graph template for all other sites, or apply defined flow conversion settings from one device to others. Wizards guide you through instrument changes at monitoring sites. Automated schedules handle your repetitive tasks.

The Flowlink Family

Teledyne Isco offers a family of Flowlink software products.

Flowlink LE is a basic edition for simple tasks such as instrument configuration, data retrieval, and data exporting. This software produces pre-defined graphs and tables that contain a single type data such as level or velocity, for a quick assessment of site conditions.
[Request Isco product data sheet L-2129]

Flowlink 5.1 software is a full-featured version for small and large flow monitoring projects. In addition to the features of Flowlink LE, Flowlink 5.1 generates user-customized graphs and tables containing many data types with statistical analysis. The Flowlink 5.1 database can be accessed by a single user at a time.

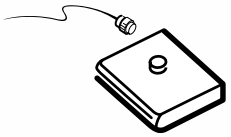
Flowlink Pro is an enterprise version that includes the features of Flowlink 5.1 and supports multiple users with differing roles. This server/client configuration accepts "pushed data" from sites equipped with Isco communication modules via the Internet for hands-off data collection. It also includes advanced server-based alarm notifications. Non-Flowlink users can view Flowlink Pro data in a Web browser, any time, any place.
[Request Isco product data sheet L-2132]

Communications & Data Acquisition

Site Communication

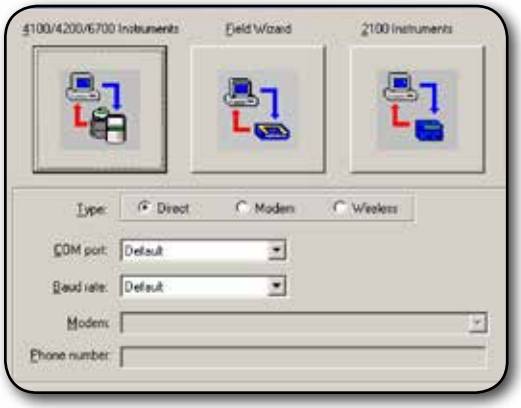
Flowlink software communicates with site instruments to configure the operation and data logging, and to retrieve data. Communication options rely your computer's capabilities and site hardware, and generally may include:

- Direct connections via a cable to your computer's USB or serial port
- Computer modem to site modem via land-line telephone service
- Computer modem to site CDMA or GSM modem via cellular telephone service
- Unlicensed spread-spectrum radio communication using base and remote 2102 Wireless Communication modules.



Direct wired connections

Telephone Modem, Cellular Modem, and Spread-spectrumRadio

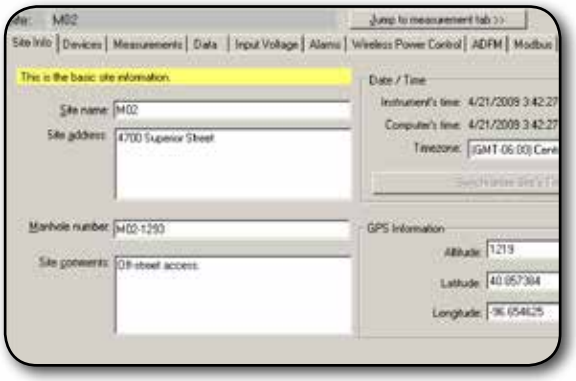


Data Collection Alternatives

Site data may be also be retrieved using an intermediate device such as the 2101 Field Wizard module or the 581 Rapid Transfer Device (RTD).

Options for Non-Isco Data: Isco's 2105 Network Interface module conveniently collects data from non-Isco instruments at the site and stores it alongside Isco data until retrieved by Flowlink 5.1 software. This interface module accepts SDI-12, Modbus, and 4-20 mA (via a third-party Modbus converter).

Flowlink 5.1 software can also import CSV files containing non-Isco data.



Site Configuration

For compatible devices, Flowlink 5.1 software exposes the device's configuration, allowing you to program its operation. If the site is a stack of Isco 2100 series modules, you can configure all of the devices through a single Flowlink connection.

Flowlink can configure SMS and TAP messaging so that on-site equipment monitors the conditions and deliver alarm notifications as needed.

Compatible Devices

- 2100 Series flow, interface, and communication modules
- 4100 Series flow loggers
- 4200 Series flow meters
- 67x logging rain gauges
- ADFM velocity-profiling flow meters
- 6700/Avalanche Series samplers
- 700 Series modules
- Isco-ready sondes connected to 6700 or 4200 devices
- SDI-12 devices connected to a 6712 sampler or 2105 interface module

Graphs and Reporting

Applications

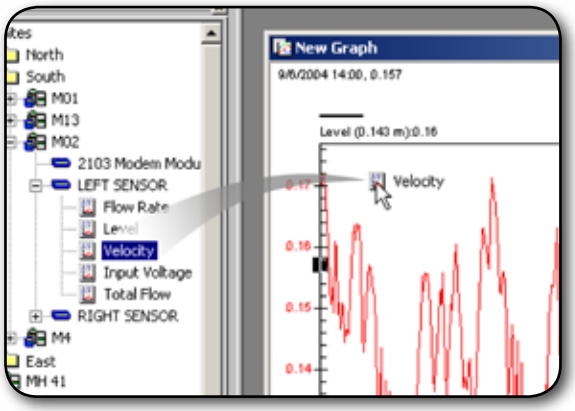
From the collected site data, Flowlink 5.1 software can prepare graphs and tabular reports for many water monitoring projects:

- WWTP influent and effluent
- Custody transfer and billing
- Scatter plots to evaluate channel conditions

Flowlink software also includes statistical functions to produce graphs and reports for advanced studies such as:

- Capacity assessment
- Inflow and infiltration
- Wet vs. dry weather comparisons
- Storm events

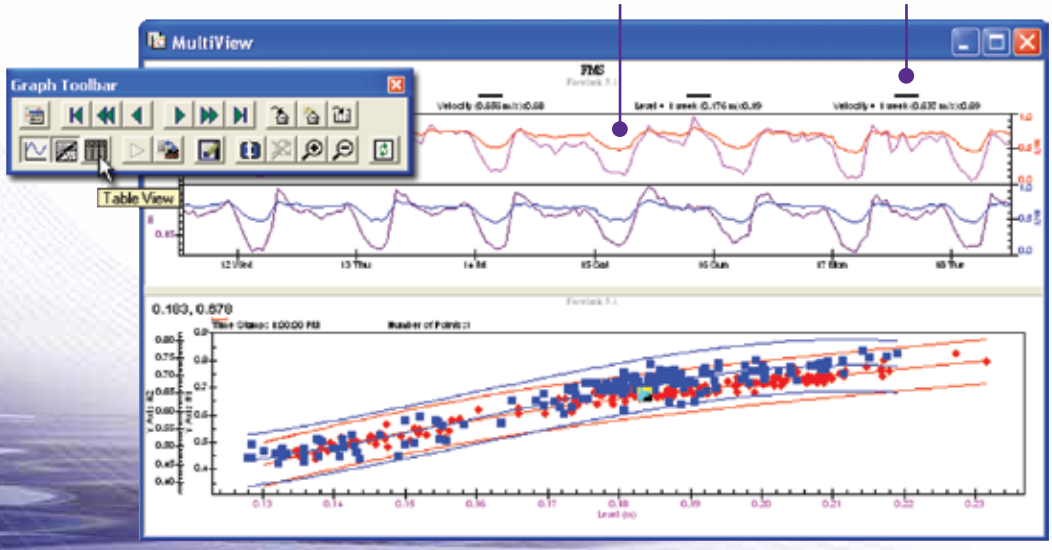
■ Start a graph by double-clicking on your data. Drag-and-drop additional data to see even more.



■ Graph, scatter plot, and table views — display one, two, or all at the same time with the click of a button!

Use series formulas to know the relation between sites or parameters.

Compare data from multiple sites (shown), calculated flows, and reference curves.



■ Generating summary data tables can be as easy as dragging and dropping a site onto a table template.

Min/Max/Avg

Flowlink

Date/Time	Average Flow Rate (gpm)	Minimum Flow Rate (gpm)
4/16/2004 3:00:00 AM	350	150
4/17/2004 3:00:00 AM	360	170
4/18/2004 3:00:00 AM	360	170
4/19/2004 3:00:00 AM	350	160
4/20/2004 3:00:00 AM	360	160
4/21/2004 3:00:00 AM	370	160
4/22/2004 3:00:00 AM	360	170
4/23/2004 3:00:00 AM	370	170
4/24/2004 3:00:00 AM	360	160
4/25/2004 3:00:00 AM	380	180
4/26/2004 3:00:00 AM	360	170
4/27/2004 3:00:00 AM	350	160
4/28/2004 3:00:00 AM	360	160
4/29/2004 3:00:00 AM	400	180

Average Flow Rate (gpm)	Minimum Flow Rate (gpm)
360	150

Total
7357556.6 gal

■ Combine many different data types to reveal as much or as little of the event you need to see.

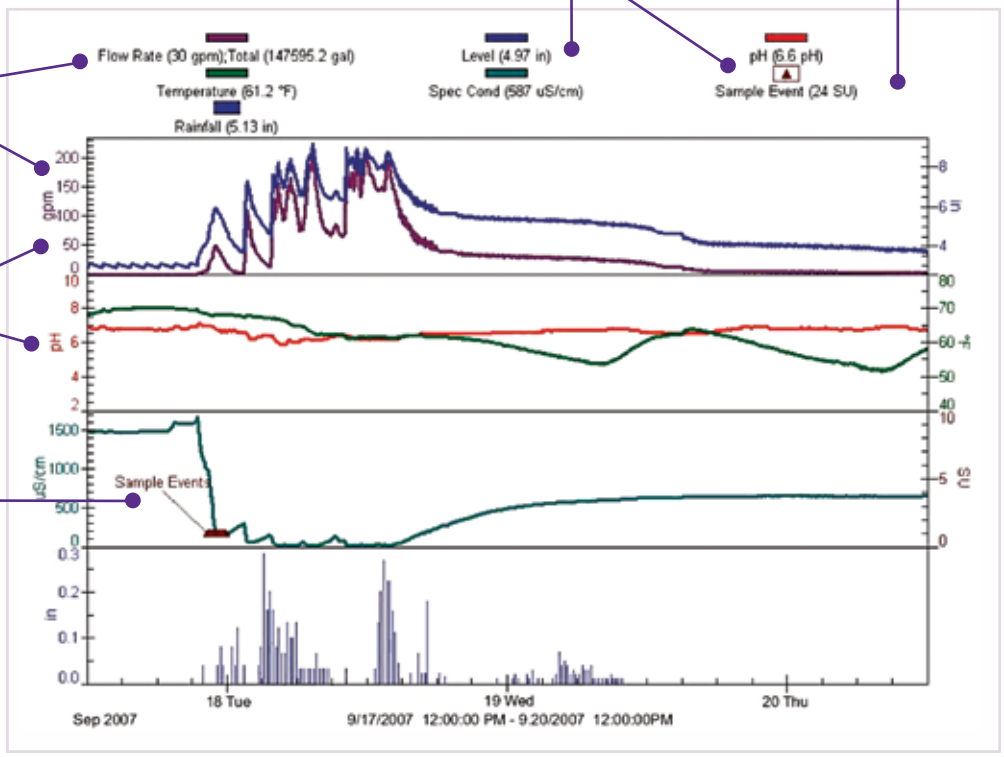
Automatically calculate average or total values for the displayed data.

Validate flows by overlaying flow rates calculated from a continuity equation or Manning formula.

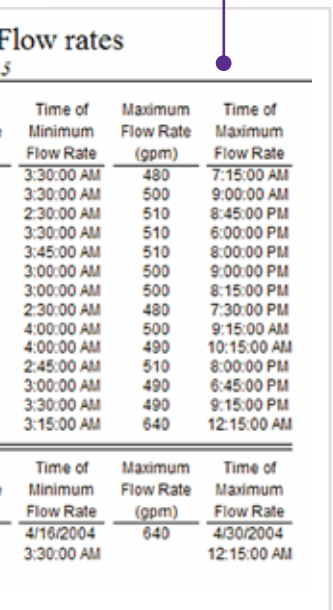
Legend and axis labels are automatically generated for each data type.

Overlay and mix data types such as flow rate and level, or pH and temperature.

Add text to annotate key events or actions.



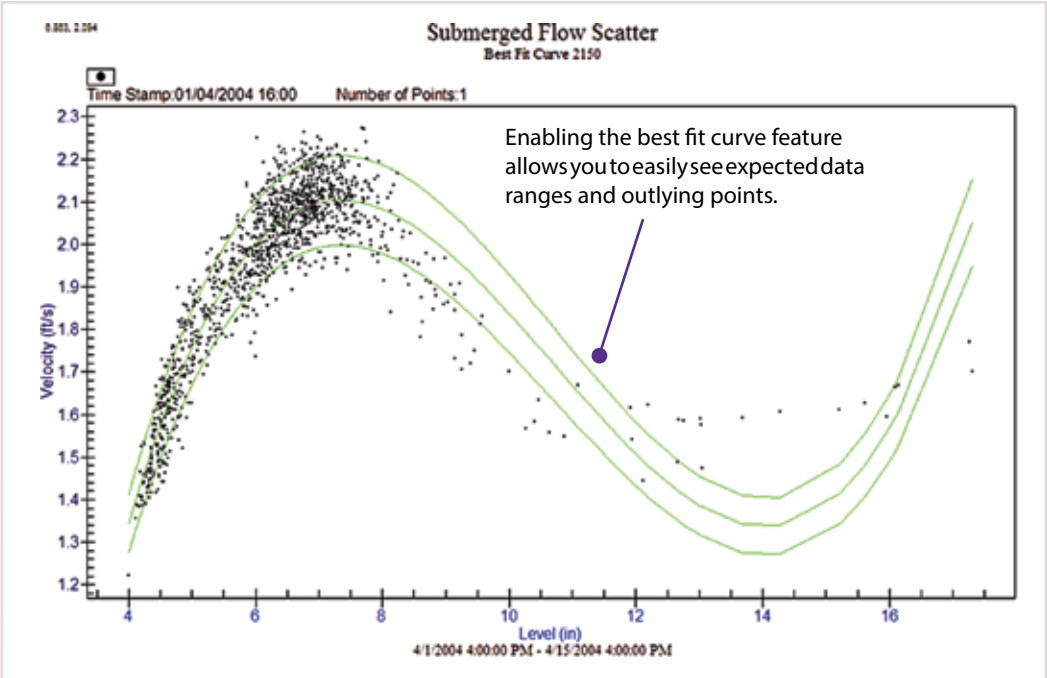
Quickly show hourly, daily, weekly, or monthly averages, minimums, maximums, etc.



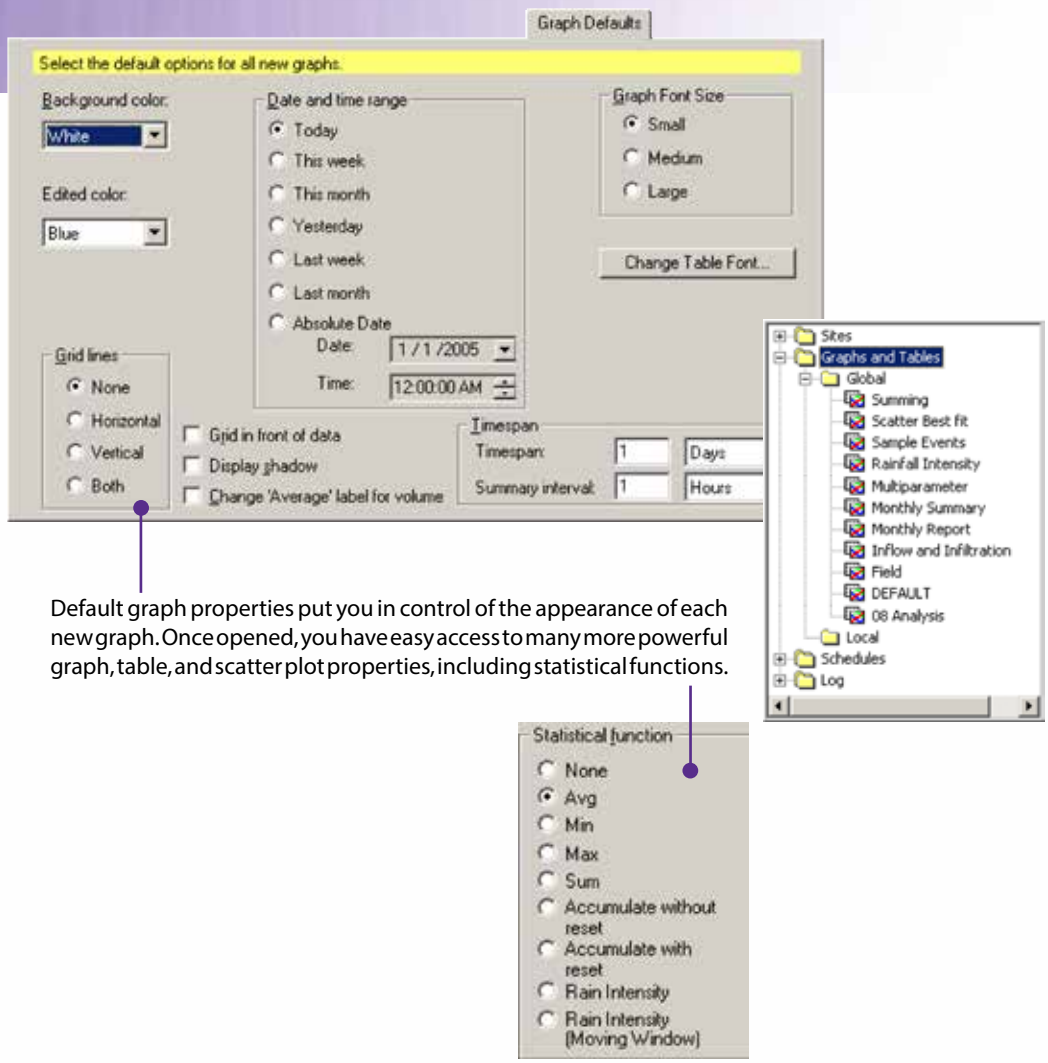
Flow rates

	Time of Minimum Flow Rate	Maximum Flow Rate (gpm)	Time of Maximum Flow Rate
	3:30:00 AM	480	7:15:00 AM
	3:30:00 AM	500	9:00:00 AM
	2:30:00 AM	510	8:45:00 PM
	3:30:00 AM	510	6:00:00 PM
	3:45:00 AM	510	8:00:00 PM
	3:00:00 AM	500	9:00:00 PM
	3:00:00 AM	500	8:15:00 PM
	2:30:00 AM	480	7:30:00 PM
	4:00:00 AM	500	9:15:00 AM
	4:00:00 AM	490	10:15:00 AM
	2:45:00 AM	510	8:00:00 PM
	3:00:00 AM	490	6:45:00 PM
	3:30:00 AM	490	9:15:00 PM
	3:15:00 AM	640	12:15:00 AM
	Time of Minimum Flow Rate	Maximum Flow Rate (gpm)	Time of Maximum Flow Rate
	4/16/2004 3:30:00 AM	640	4/30/2004 12:15:00 AM

■ Level/velocity scatter plots give you great insight into channel conditions.



Enabling the best fit curve feature allows you to easily see expected data ranges and outlying points.



Default graph properties put you in control of the appearance of each new graph. Once opened, you have easy access to many more powerful graph, table, and scatter plot properties, including statistical functions.

Add Graphs to Your Office Documents

Include Flowlink 5.1 software's graphs and tables in Microsoft® Word®, Excel®, and PowerPoint® with object linking and embedding (OLE). Embed the Flowlink reports to share the document with others, or link the reports for automatic updates each time you open the document.

Share Your Data

Flowlink software exports data to comma-separated values (CSV) format for easy import into other data processing applications. HTML and PDF formats allow you to share graphs and reports with others.

Data Editing

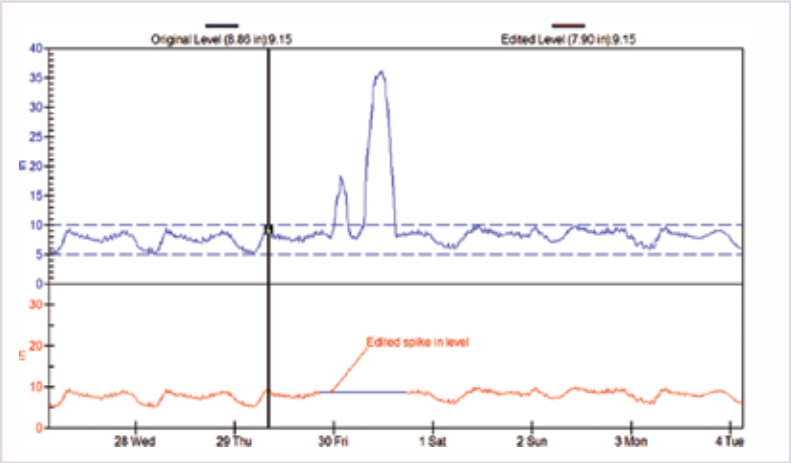
External noise or site condition adversely affected the data quality…
Data from a flow meter lacking Isco's exceptional stability drifted…
A technician incorrectly calibrated the level setting…

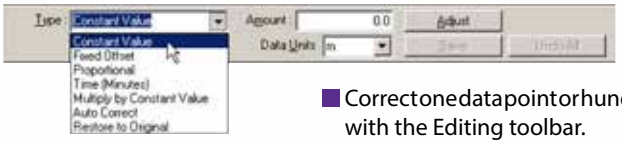
With Flowlink 5.1 software, you can easily correct these anomalies. You can correct a single data point or hundreds at a time with the available editing functions, which include constant values, fixed offsets, proportional adjustments, multiply by constant values, time offsets, auto correct, copy, paste, cut, insert, click-and-drag, etc.

You can enable the editing features in any graph, table, or scatter plot view. Display options allow you to view edited data in a different color.

Your data is safe — the Flowlink 5.1 database always stores the original readings. If needed, you can restore the edited data to the original readings.

■ Erroneous spikes skew calculations. Fixing them is easy — simply highlight the spike and click "auto-correct."





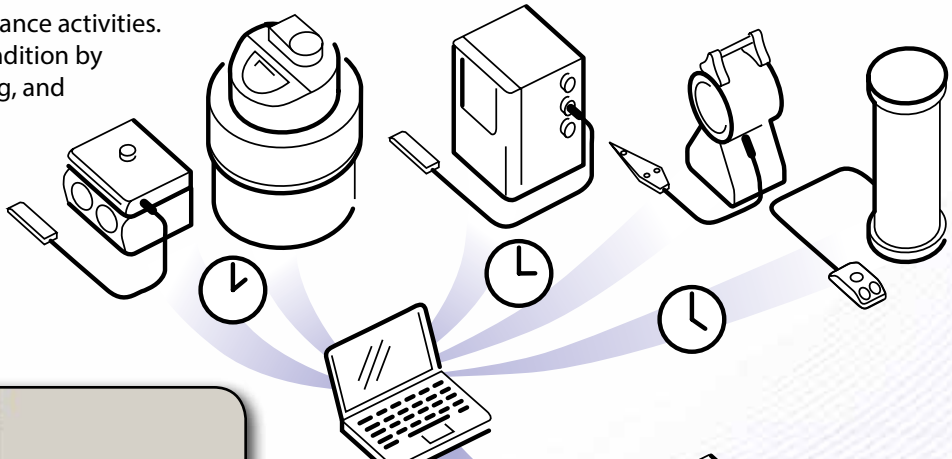
■ Correct one data point or hundreds with the Editing toolbar.

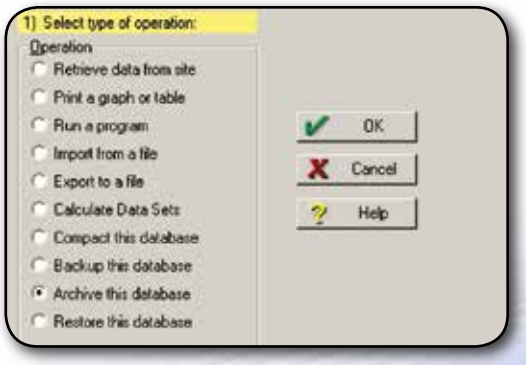
Automation

Do you need yesterday's flow data report at the start of your business day? Schedule Flowlink 5.1 software to automatically connect to the monitoring sites overnight, collect data, generate reports, and send them to the printer where they will be waiting for you.

You can also schedule database maintenance activities. Keep your database trim and in peak condition by scheduling regular compacting, archiving, and backup operations.

External programs or scripts can access Flowlink 5.1 operations through command line switches and variables.





Specifications

Minimum Computer Requirements[1]

Operating System:	Microsoft Windows XP, 7, 8, and Windows 10 Call for newer Windows operating systems.
Microprocessor:	Client: 1 GHz Flowlink Pro Server: Consult the factory
RAM:	2 Gigabytes
Hard Drive:	2 Gigabytes
Disk Drive:	CD ROM
Monitor:	SVGA, 1024 x 768 resolution
Printer:	Color (recommended)
Communication:	Serial or USB port with appropriate Isco Interrogator Cable, and/or Hayes™ compatible telephone modem

Get Flowlink 5.1 Software

Try Before You Buy

You can evaluate Flowlink 5.1 software at no cost to you. Contact your Teledyne Isco representative and request the 45-day demonstration license, part number 68-2540-202. For longer-term evaluation, ask about leasing options.

"The Future of Flow!" ™

Order Flowlink 5.1 Software

Flowlink 5.1 software, two user licenses.....68-2540-200

One additional user license.....68-2540-204

Contact your Teledyne Isco representative for information on—

- Special pricing for registered Flowlink 4 and 5.0 users
- Upgrades from Flowlink LE or to Flowlink Pro

TELEDYNE ISCO
A Teledyne Technologies Company

4700 Superior Street
Lincoln, NE 68504 USA
Telephone: (402) 464-0231
USA & Canada: (800) 228-4373
Fax: (402) 465-3022
E-mail: iscoinfo@teledyne.com
Internet: www.isco.com/fm