2009

Sampler Source Book

A guide to the world’s finest water samplers and accessories
Integrated Manufacturing
In-house design, manufacturing and assembly assure consistent quality and superior performance. You can depend on Teledyne Isco products.

Worldwide Sales and Service
Friendly, knowledgeable help is available in more than forty countries. Contact us today to arrange a consultation or product demonstration.

Leasing
The ideal way to avoid large capital outlays for short-term projects. Whether you need one sampler or fifty, IscoLease offers competitive rates and fast delivery.

Special Applications
Isco’s 4700 Refrigerated Sampler

Introducing the newest addition to our sampler family.

See page 14 for all the exciting details!
### Sampler Selection Guide

<table>
<thead>
<tr>
<th>Sampler Model</th>
<th>Portable</th>
<th>Refrigerated</th>
<th>Portable Refrigerated</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLS 3700 3710 3700C 3710C 6712 6712C 4700 6712FR</td>
<td>✔✔✔ ✔✔</td>
<td>✔✔ ✔ ✔</td>
<td>✔ ✔</td>
</tr>
</tbody>
</table>

#### Applications

- **WWTP**
- **Collection Systems**
- **Water Quality Monitoring**
  - Stormwater
  - TMDL
  - Watershed
  - Resource Water
  - River Monitoring
- **Sampler Accessories**
  - Flow-through chamber
  - YSI 600R/SDI-12
  - 674 Rain Gauge
  - 700 Modules
  - Pressurized Line Sampling
  - 1640 Liquid Level Actuator
  - Locking Harness
  - Suction Line & Strainer
- **Street Level Tools**
  - Suspension Harness
  - ProHanger™
  - Street Level Installation Tool
- **Data Handling**
  - Flowlink® Software
  - GSM/CDMA Cellular Option
  - 581 RTD
  - Land Line Modem
  - 2102 Wireless Module
  - 2105 Interface Module
- **Power Products**
  - Batteries
  - Solar Chargers

#### Water Quality Monitoring

- **Stormwater**
- **TMDL**
- **Watershed**
- **Resource Water**
- **River Monitoring**

#### Sampler Accessories

- **Flow-through chamber**
- **YSI 600R/SDI-12**
- **674 Rain Gauge**
- **700 Modules**
- **Pressurized Line Sampling**
- **1640 Liquid Level Actuator**
- **Locking Harness**
- **Suction Line & Strainer**

#### Street Level Tools

- **Suspension Harness**
- **ProHanger™**
- **Street Level Installation Tool**

#### Data Handling

- **Flowlink® Software**
- **GSM/CDMA Cellular Option**
- **581 RTD**
- **Land Line Modem**
- **2102 Wireless Module**
- **2105 Interface Module**

#### Power Products

- **Batteries**
- **Solar Chargers**
Table of Contents Page
Sampler Selection Guide .....................2
Table of Contents ............................3

Portable Samplers
◆ GLS ...........................................4
◆ 3700 Series .................................5-7
  - 3700 .......................................6
  - 3710 .......................................7
  - 3700C ......................................6
  - 3710C ......................................7
◆ 6712 Series .................................8-11
  - 6712 .......................................11
  - 6712C ......................................11
  - 6712FR ....................................10
◆ 700 Series Plug-in Modules .............12-13
  - 701 .......................................12
  - 710 .......................................12
  - 720 .......................................13
  - 730 .......................................13
  - 750 .......................................13
  - 780 .......................................13

Stationary Refrigerated Samplers
◆ 6712FR .......................................10
◆ 4700 .........................................14

Portable Refrigerated Samplers
◆ Avalanche® ..................................15
◆ Glacier® .....................................15

Data Handling
◆ Flowlink® ....................................17
◆ Cellular Modem Options .................16
  - GSM ......................................16
  - CDMA ....................................16
◆ 581 Rapid Transfer Device (RTD) .......16
◆ Telephone Modem .........................16
◆ 2102 Wireless Module ....................16
◆ 2105 Communications Module ..........17

Sampler Containers
◆ Bottles ......................................18
◆ ProPak® .....................................18

Power Products
◆ Batteries ....................................19
◆ Solar Chargers ..............................19

Sampler Accessories
◆ Flow-through Chamber ..................20
◆ YSI/SDI-12 Cables .........................21
◆ 674 Rain Gauge ............................20
◆ 700 Series Plug-in Modules .............12-13
◆ Pressurized Line Sampling ..............20
◆ 1640 Liquid Level Actuator .............21
◆ Locking Harness .........................21
◆ Suction Lines & Strainers ..............20

Street Level Tools
◆ Suspension Harness .....................21
◆ Pro Hanger™ ..............................21
◆ Street Level Installation Tool ..........21
GLS Composite Sampler

Our smallest sampler. The GLS delivers full-size sampling capability and goes where standard samplers won’t. Its tapered design slips easily in and out of small or offset manholes. Isco’s patented* LD-90 Liquid Presence Detector, and our pump revolution counting system assure accurate, repeatable volumes.

Exclusive Quick-touch Operation for Simple Field Use

Just select a sampling routine and store it as the default. Then, when in the field, call up the program with quick double-touch and hit the green “GO” button. It’s that easy!

The GLS begins its pre-set routine with just the push of a button. Simplified operation means no special training is required.

Weight: (dry) 24.5 lbs. 11.1 kg
Dimensions: (H x D) 26.5 x 16.5 in 67.3 x 41.9 cm
Operating Temperature: 32° to 120°F 0° to 49°C
Controller Rating: NEMA 4X, 6 IP67

For complete information and specifications, request Data Sheet #L-1116.

◆ Compact 16.5-inch (67.3 cm) diameter
◆ Less than 25 lbs. (11.1 kg), empty weight
◆ Uniform time interval sampling
◆ Flow-paced sampling with or without time delay
◆ Fold-away handle

*Patent 5,125,801
3700 Series Portable Samplers

Get accurate, repeatable sample volumes every time with our patented* LD-90 Liquid Presence Detector and pump revolution counting system. The LD-90 automatically compensates for head height change and automatic suction line rinsing eliminates cross contamination of samples. It’s non-contacting, and unaffected by conductivity, viscosity, temperature, or liquid composition.

3700 — Sequential/Composite

Our 3700 Samplers collect sequential or composite samples based on time or flow rate.

A built-in multiplexing feature expands sampling versatility. It allows multiple samples to be placed in individual bottles, or samples to be placed into multiple bottles after each sampling interval. Several multiplexing modes allow you to quickly set up an ideal routine for your application.

Environmentally-sealed Controller

All 3700 controller components are protected by a tough NEMA 4X, 6 (IP 67) enclosure, for submersible, water- and dust-tight, corrosion-resistant operation.

Dependable Distributor

A Geneva-drive distributor locks the distributor arm into exact position above the bottles, assuring accurate delivery.

Superior Sample Preservation

The 3700 portable sampler series features thick foam insulation (R-11) and a large ice capacity to keep your samples chilled longer.

*Patent 5,125,801
3700 Full Size – Sequential/Composite Sampler

Our full-featured 3700 Sampler collects sequential or composite samples based on time or flow rate. The full-size 3700 sampler is ideal for general purpose sampling and offers features for most applications.

This sampler is also offered with a jumbo base to allow for larger single bottle sampling volumes.

3700C Compact – Sequential/Composite Sampler

The 3700C is ideal for moving from one site to another. Its small size and weight allows for easy installation into 18-inch/0.46 meter diameter manholes without disassembly or awkward maneuvering.

Our unique bottle carrier for sequential sampling makes bottle changing quick and easy.

Weight: (dry) 37 lbs. 16.8 kg
Dimensions: (H x D) 25.25 x 19.88 in 64.1 x 50.5 cm
Operating Temperature: 32° to 120°F 0° to 49°C
Controller Rating: NEMA 4X, 6 IP67

Weight: (dry) 25 lbs. 11.3 kg
Dimensions: (H x D) 27.75 x 17.75 in 70.5 x 45 cm
Operating Temperature: 32° to 120°F 0° to 49°C
Controller Rating: NEMA 4X, 6 IP67

For complete information and specifications, request Data Sheet #L-1135.

For complete information and specifications, request Data Sheet #L-1118.
### 3710 Full size – Composite-only Sampler
Isco’s economical 3710 Sampler provides composite sampling only, delivering savings where sequential sampling isn’t needed.

<table>
<thead>
<tr>
<th>Weight: (dry)</th>
<th>32 lbs.</th>
<th>16.8 kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions: (H x D)</td>
<td>28.75 x 19.25 in</td>
<td>73.3 x 48.9 cm</td>
</tr>
<tr>
<td>Operating Temperature:</td>
<td>32° to 120°F</td>
<td>0° to 49°C</td>
</tr>
<tr>
<td>Controller Rating</td>
<td>NEMA 4X, 6</td>
<td>IP67</td>
</tr>
</tbody>
</table>

For complete information and specifications, request Data Sheet #L-1120.

---

### 3710C Compact – Composite-only Sampler
The 3710C is ideal for use in small, cramped spaces where a full-size sampler won’t fit. This sampler will pass through small or offset manholes without disassembly or awkward maneuvering.

<table>
<thead>
<tr>
<th>Weight: (dry)</th>
<th>32 lbs.</th>
<th>11.3 kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions: (H x D)</td>
<td>27.75 x 17.75 in</td>
<td>70.5 x 45 cm</td>
</tr>
<tr>
<td>Operating Temperature:</td>
<td>32° to 120°F</td>
<td>0° to 49°C</td>
</tr>
<tr>
<td>Controller Rating</td>
<td>NEMA 4X, 6</td>
<td>IP67</td>
</tr>
</tbody>
</table>

For complete information and specifications, request Data Sheet #L-1124.
6712 Series

6712 Series Samplers
Since their introduction, Isco’s 6700 Series Samplers have set the industry standard for performance, reliability, advanced features, and ease of use.

6712 Samplers offer “plug and play” sampling and data logging, remaining compatible with existing Isco equipment and allowing you to get the most from your sampling budget.

Superior Sample Delivery With Our High-performance Peristaltic Pump
The 6712 pump delivers samples at US EPA and ISO-recommended 2.0 ft/s (0.61 m/s), even at head heights of 25 ft (7.6 m). At a 3 ft. (0.9 m) head, line velocity is 3.1 ft/s (0.94 m/s).

Our pump revolution counter assures consistent sample volumes, even when battery power is low, and is used to notify you when pump tubing should be replaced. An exclusive safety interlock automatically disconnects power when you change tubing.

LD-90 Liquid Detector
This patented* non-contacting detector ensures that sample volumes are precise and repeatable – regardless of head height variation. Upon liquid detection, sample volume is metered by our pump revolution counter. Any volume deficits due to air slugs are accurately compensated for.

*Patent # 5,125,801

- Expand your monitoring capabilities with plug-in modules for flow, pH, and other parameters.
- Get accurate, repeatable samples with Isco’s exclusive delivery system.
- Benefit from multi-parameter capabilities and SDI-12 data logging.

Pump Performance Comparison
The 6712 pump is not as affected by varying head heights as other samplers. From one sample to the next, the 6712 pump eliminates variability in sample content due to inconsistent sample velocities.
6712 Series

Versatile Programming
Isco 6712 Standard and Enhanced program modes allow quick efficient setup for virtually any application:

- Stormwater monitoring
- CSO and SSO monitoring
- Permit compliance
- Pretreatment compliance
- Surface water monitoring

And with the 6712, on-line programming help is just a keystroke away.

Standard Program Mode
Quickly select the desired parameters and sampling sequence from the simple step-by-step menu.

Choose:

- When to start
- Sample distribution
- Volume to collect
- Time- or flow-pacing

For continuous sampling, just replace filled bottles with empty ones.

Enhanced Program Mode
Easily enter complex programs for unique applications. Actuate via Isco plug-in modules, rain gauges, or other external devices.

Available routines include:

- Pause and resume for intermittent discharge flow monitoring
- Sampler pacing by time, non-uniform time, flow, or external event
- Time-paced or flow-weighted sample collection
- Two-part programming to reserve a designated bottle group for event-triggered samples or stormwater sampling

Integrated Water Monitoring
Isco 6712 Samplers feature “Plug-and-Play” connection for SDI-12 compatible devices, including sondes and many other measuring devices from leading manufacturers. Use inputs from up to ten separate devices for flexibility in logging data and triggering sample collection.

Data Logging
The 6712 functions as an SDI-12 data logger and connects to any sensor that fully implements the protocol standard. In addition, Isco has defined extended commands (which several sensor manufacturers have implemented) for ease of programming. Data are identified and logged by their specific type. Plug-in module and rain gauge data are also stored for later retrieval.

Get integrated measurement and reporting capabilities for:

- TMDL monitoring
- Stormwater runoff
- Rivers, lakes, and estuaries
- Non-point source pollution
- Combined sewer overflow
- Wastewater effluent
- Industrial enforcement monitoring
Get the advantages of “Smart Monitoring” with these 6712 capabilities.

6712FR Stationary

You get proven protection from exposure to hostile environments – indoors or out. The exterior is custom-molded from polyester resin fiberglass. UV-resistant gel coat provides a smooth finish for easy cleaning.

An automatically controlled, built-in heater, prevents sample freezing down to -24°F (-31°C). A solid-state thermostat and three temperature sensors monitor interior and ambient air as well as the evaporator plate for absolute temperature control. Optional temperature logging displays real-time temperature and stores periodic readings for later retrieval.

Thick, foamed-in-place insulation guarantees properly preserved samples and frost-free operation. The rugged stainless steel framework and refrigeration components are protected by polyester tubing, phenolic paint, or polyester powder coating.

An optional controller heater can be added to insure uninterrupted operation down to -20°F (-29°C).
The 6712 Sampler offers the most versatility for most sampling applications. Eleven bottle configurations facilitate all types of monitoring.

The 6712 holds up to 30 pounds (13.5 kg) of ice in its fully insulated base.

Note: Also available with jumbo base for use with 5- and 5.5-gallon bottles.

6712 Portables
- Vacuum-formed ABS withstands exposure and abuse
- NEMA 4X, 6 (IP67) rated
- Foamed-in-place insulation in the base and center section
- Multiple bottle configurations

6712 Full-size
The 6712 Sampler offers the most versatility for most sampling applications. Eleven bottle configurations facilitate all types of monitoring.

This compact sampler also uses our convenient bottle carrier system – which provides faster and easier bottle exchange. Simply remove the carrier from the base, and replace it with another. It is also a safe and convenient way to transport your samples to the lab.

6712C Compact
The 6712C is ideal when you require advanced capabilities in a smaller sampler. Its tapered design allows it to easily maneuver through small or offset manholes.

For complete information and specifications, request Data Sheet #L-1107.

For complete information and specifications, request Data Sheet #L-1108.

6712 Series

<table>
<thead>
<tr>
<th>Weight:</th>
<th>32 lbs.</th>
<th>15 kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions: (H x D)</td>
<td>27.0 x 19.96 in</td>
<td>68.6 x 50.7 cm</td>
</tr>
<tr>
<td>Operating Temperature:</td>
<td>32° to 120°F</td>
<td>0° to 49°C</td>
</tr>
<tr>
<td>Controller Rating:</td>
<td>NEMA 4X, 6</td>
<td>IP67</td>
</tr>
<tr>
<td>For complete information and specifications, request Data Sheet #L-1107.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weight:</th>
<th>31 lbs.</th>
<th>14 kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions: (H x D)</td>
<td>27.6 x 17.75 in</td>
<td>70.1 x 45.1 cm</td>
</tr>
<tr>
<td>Operating Temperature:</td>
<td>32° to 120°F</td>
<td>0° to 49°C</td>
</tr>
<tr>
<td>Controller Rating:</td>
<td>NEMA 4X, 6</td>
<td>IP67</td>
</tr>
<tr>
<td>For complete information and specifications, request Data Sheet #L-1108.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Plug-in Modules

700 Series Modules let you add flow measurement, pH, or intelligent analog input to your 6712 Sampler.

The 6712 Sampler recognizes each different module and automatically shows you the relevant programming menu. Parameter data is displayed on the LCD for spot checking and variation. Data includes summaries, flow rate, level, pH, and temperature, along with sampling status.

The raw readings are stored at user programmable intervals for later retrieval.

The modules are rated NEMA 4X, 6 (IP67).

701 pH and Temperature Module

Accurate pH and temperature monitoring in a single module. Our pH probe exposes the temperature sensor directly to the flow stream, ensuring correct adjustments for temperature changes. Activate your 6712 Sampler at user-selected pH or temperature ranges and save by collecting and analyzing only samples outside normal parameters.

For complete information and specifications on the 701 module, request Product Data Sheet #L-1130.

710 Ultrasonic Flow Module

This field-proven ultrasonic technology doesn’t require submersion so it suits a wide variety of applications. Simply mount the sensor at least one foot above maximum flow stream level.

For complete information and specifications on the 710 module, request Product Data Sheet #L-1131.
720 Submerged Probe Flow Module
A channel-mounted differential pressure transducer provides accurate measurement where wind, steam, foam, turbulence, or air temperature fluctuations exist – even if the probe gets covered with silt or sand. Suitable for small channels.

For complete information and specifications on the 720 module, request Product Data Sheet #L-1132.

750 Area Velocity Flow Module
Get accurate measurement where weirs and flumes aren’t practical – or where submerged, full-pipe, surcharged, and reverse flow conditions may occur. No need to estimate channel slope or roughness. Sensor mounts in the channel and uses patented* Doppler technology to directly measure average flow velocity. *Patent # 5,371,686

For complete information and specifications on the 750 module, request Product Data Sheet #L-1134.

730 Bubbler Flow Module
Unaffected by changing stream conditions, the 730 delivers accurate level measurement despite temperature fluctuations and exposure to harsh chemicals.

For complete information and specifications on the 730 module, request Product Data Sheet #L-1133.

780 Analog Input Module
Add intelligent interpretation of any 4-20 mA signal. Characterize analog signals as flow rate or percentage of full scale. Pace or trigger your 6712 Sampler, and store data for retrieval and analysis.

For complete information and specifications on the 780 module, request Product Data Sheet #L-1129.
4700 Stationary Refrigerated Sampler

Forward thinking is evident from top to bottom in Isco’s groundbreaking 4700 Sampler. Its rotationally-molded construction, user-friendly controls, and workplace-savvy features make it the new choice for stationary sampling in both municipal and industrial wastewater applications.

Control and programming are fast, simple, and easily accomplished on-site. A unique slide-out bottle rack eliminates awkward stooping and bending to reach sample containers.

The controller actively regulates and displays the sample compartment temperature, and logs a one-minute average to confirm proper sample cooling. You can download the temperature record with a basic utility program such as HyperTerminal.

The tough, double-wall LLDPE cabinet shrugs off exposure to weather and harsh environments. It’s filled from top to bottom with insulation for efficient, economical cooling even in hot, humid environments.

Heat-treated polyester powder coating protects the refrigeration system, ensuring long life and reliability in corrosive conditions.

Sampling modes

- Uniform time intervals – uniform sample volumes
- Uniform time intervals – flow-proportioned sample volumes
- Uniform sample volumes – flow-proportioned time intervals

Standard features

- Composite or sequential sampling
- -20° to 120° F operating range – without additional heaters
- Four digital alarm outputs
- 4-20 mA flow meter input
- Powerful compressor delivers energy-efficient, high-performance cooling

The 4700 is especially well suited for outdoor environments. Its roto-molded cabinet provides a degree of durability and insulation that’s unmatched in the industry.
**Glacier® Composite Sampler**

The compact size, light weight, and mobility of a portable without the need for ice.

Its power-saving cooling system can be set to standby until the first sample is drawn. Glacier will wait patiently for days – or weeks – to collect event-triggered samples, then preserve them until a convenient pick-up time.

You can expect 48 hours or more of refrigeration time from a 12-Volt deep-cycle battery.

**Avalanche® Multi-bottle Sampler**

The Avalanche is based on Isco’s industry-leading 6712 controller, so in addition to its power-saving standby feature, you can set and run a variety of sampling programs.

A unique fan and shroud assembly circulates air throughout the refrigeration compartment for maximum cooling. Samples are accurately preserved at 3°C, even under the most difficult conditions. The cooling compartment accepts configurations ranging from a single 5- or 2.5-gallon bottle to four 1-gallon, or fourteen 950-ml containers.

---

**Glacier shown with mobility cart option.**

**Avalanche shown with mobility cart option.**

---

**Weight: (dry, less battery)**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Glacier</strong></td>
<td>60 lbs.</td>
<td>28 kg</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>25 x 15 x 24 in</td>
<td>63 x 38 x 60 cm</td>
</tr>
<tr>
<td><strong>Operating Temperature</strong></td>
<td>32° to 120°F</td>
<td>0° to 49°C</td>
</tr>
<tr>
<td><strong>Controller Rating</strong></td>
<td>NEMA 4X, 6</td>
<td>IP67</td>
</tr>
</tbody>
</table>

*Weight and dimensions do not include optional mobility cart. For complete information and specifications, request Data Sheet #L-1128.

---

**Avalanche**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimensions</strong></td>
<td>30.5 x 14 x 24 in</td>
<td>78 x 36 x 60 cm</td>
</tr>
<tr>
<td><strong>Operating Temperature</strong></td>
<td>32° to 120°F</td>
<td>0 to 49°C</td>
</tr>
<tr>
<td><strong>Controller Rating</strong></td>
<td>NEMA 4X, 6</td>
<td>IP67</td>
</tr>
</tbody>
</table>

*Weight and dimensions do not include optional mobility cart. For complete information and specifications, request Data Sheet #L-1123.
Data Retrieval and Reporting

The 6712’s large memory allows you to capture a large amount of sampling and parameter data that can be retrieved by various methods. You can retrieve your program settings for spot checking and chain-of-custody documentation.

Telephone Modem

This popular option lets you initiate sampling routines or change programs, have the sampler call you for user-programmable alarm conditions, and retrieve data (using Flowlink software).

Cellular GSM or CDMA Modem Capability

Isco offers two methods of cellular communication for 6712 and Avalanche Samplers located in remote or difficult-to-access areas. These options allow samplers to transmit text message alarms to a text-enabled phone or pager, and to communicate with a modem-equipped PC for remote data retrieval and control.

Specific contact times can be programmed allowing energy-saving features to power down the system during the “off” times, without affecting alarm notification ability.

581 Rapid Transfer Device

A durable alternative to exposing vulnerable laptops in the field is our pocket-sized RTD. Simply plug it into the port on a 6712 Sampler – or other Isco instruments and level, rainfall, water quality, and sampling data are quickly transferred to the device.

Its flexible memory has storage for over 900,000 bytes of data – typically enough to retrieve data from 2 samplers.

Wireless Data Retrieval

Isco’s 2102 Wireless Module can be interfaced with 6712 Samplers to allow “drive-up” data retrieval from inside your vehicle. A single worker can quickly and safely perform tasks that might otherwise require a hazardous entry crew of three or more.
Flowlink® Data Management Software

The industry’s premier data handling software provides a wide variety of advanced capabilities that add convenience and value to Isco 6712 and Avalanche Samplers – as well as your entire water monitoring program.

- Make better use of work crews
- Develop more informed budgets
- Verify sewer rehab activities

Flowlink lets you generate informative graphs and tables that can be displayed with a single mouse-click. Any graph can quickly be converted to a table – or vice-versa.

Embed Flowlink graphs and tables into Microsoft Word®, Excel®, and PowerPoint®. Import and incorporate data from other sources, and export to an ASCII spreadsheet file for analysis with programs such as Microsoft Excel.

For complete information, request the Flowlink Product Brochure, #L-2127.

2105 Interface Module

The 2105 Interface Module records data from Isco Rain Gauges, SDI-12 devices, Isco Flow Meters, and devices with Modbus and analog outputs. The 2105 can also take ASCII inputs from Isco 6712 automatic samplers and 4200 Series Flow Meters.

The 2105 monitors recorded data and takes intelligent actions, such as sampler enabling and pacing, as well as alarm generation based on user-specified conditions. Recorded data can be output via Modbus and/or 4-20 mA.

The 2105 also offers a wide range of remote communication, such as wireless radio, land line modem, CDMA, GSM and GPRS cell phone. It provides a powerful, yet easy, solution for environmental studies that require interfacing of multiple instruments and common communication platforms.

For complete information, request the 2105 Product Data Sheet, #L-2145.
Sample Containers

Plastic containers with cap

- 1-liter wedge-shaped
- 500-ml wedge-shaped
- 2-liter wedge-shaped
- 1-gallon/3.8-liter round
- 2-gallon/7.5-liter rectangular
- 2.5-gallon/9.5-liter round
- 4-gallon/15-liter round
- 5.5-gallon/20-liter round

Glass containers with cap

- 350-ml round
- 950-ml round
- 1.8-liter round
- 2.5-gallon/9.5-liter round
- 5-gallon/19-liter round

ProPak® Single-use Disposable Sample Bags

These convenient bags bring a new dimension of productivity to water and wastewater sampling. The patented* Isco ProPak Sample Bag reduces sampling costs by eliminating the expense of washing and storing conventional bottles, while at the same time eliminating worries about contamination from previous samples.

The 1000 ml ProPak bags install quickly inside lightweight, reusable holders. Our 2-gallon (7.5 l) ProPak bags, for composite sampling, fit inside a durable 2.5-gallon (9.5 l) vented bottle. An O-ring holds the bag in place until the screw-on cap is installed.

*Patent #5,996,427

For complete information about ProPak disposable sample bags request the Product Data Sheet, #L-1122.
Lead-acid Batteries
Our economical lead-acid batteries are maintenance-free, and designed to hold a charge for extended periods.

Nickel/Cadmium Batteries
Your best choice for continuous use applications. Unlike lead-acid batteries, nickel cadmium batteries withstand the abuse of over-charging and can be left totally discharged without being damaged. They’re environmentally sealed for maintenance-free, worry-free operation. Isco 934 batteries are ideal for wastewater sampling and flow measurement.

High-capacity Power Packs
Convert nominal 120 or 240V AC to 12V DC. A built-in battery charger quickly and efficiently charges the battery while powering your equipment. The 913 Power Pack is UL and cUL listed.

Battery-backed Power Packs
Whenever AC power is interrupted, these power packs supply power from a built-in nickel cadmium battery. The 914 Power Pack is Underwriters Laboratory (UL) and Canadian Underwriters Laboratory (cUL) listed.

Solar Chargers
Ideal for use in remote applications. Isco offers several sizes, and can provide mounting and connecting hardware for most any installation.

Request the Power Products Brochure, #L-0104.
Flow-through Sample Chamber
This patented device allows you to do your sampling right in your lab. By installing transfer lines from monitoring points within your plant, you can collect all your samples in a central, sheltered location.
- Use with any Isco sampler and bottle configuration
- High flow rate— up to 150 GPM
- Attachable parameter probe ports

674 Rain Gauge
When connected to an Isco 6712 Sampler, rainfall information can be logged into memory for later retrieval and/or used to trigger sampling. A must-have for stormwater monitoring and CSO or I&I studies.

Suction Lines
Three types of suction line materials are available.
- Clear vinyl, 3/8- and 1/4-inch
- Black vinyl, 3/8-inch only
- PTFE-lined polyethylene, 3/8-inch only

Pressurized-line Sampling
(6712 & 4700 Samplers only)
A combination of special hardware and software allows the 6712 and 4700 Samplers to collect from a pressurized system. System configurations vary depending on the application. Contact our Special Applications (SPA) department for details.

Strainers
Three screw-in styles are available.
- Polypropylene - for general purpose sampling, 3/8-inch ID only.
- Non-metallic - for sampling in corrosive flows, 3/8-inch ID only.
- Stainless Steel - for low-flow applications, 1/4- and 3/8-inch ID tubing.

Contact the factory or your authorized Isco Representative for specific information about each type of strainer.
1640 Liquid Level Level Actuator
This device initiates a sampling routine when liquid reaches a predetermined height. The accompanying Installation and Operation Guide provides complete information.

Street Level Installation Tool —
Eliminate the risks associated with manhole entry.
Ideal for quick, safe, and economical installation of the sensors used with our 701 pH and Temperature Module, 720 Submerged Probe Flow Module, 730 Bubbler Flow Module and 750 Area Velocity Module.

The set includes mounting rings and a multi-section pole, allowing sensor installation in 6-, 8-, 10-, 12-, and 15 inch diameter pipe into manholes up to 15 feet deep. Spring tension holds the mounting ring (with sensor attached) to the pipe wall. For removal, simply pull the strap and the mounting ring collapses.

YSI 600R/SDI-12 Cables
A number of specialized cables are available to facilitate connection to an Isco Rain Gauge and/or various SDI-12 sondes and other devices.

Contact the factory or your authorized Isco Representative for information.

Suspension Harness
Stainless steel cables connect to a ring at the top of the ProHanger and attach to the sampler. Specially designed for an Isco sampler.

Locking Harness
Secure your sampler to discourage vandalism or theft. Available for all portable samplers. Set includes locking cables and padlock.

Isco ProHanger™
Use this sturdy tool to safely suspend a sampler or other instruments inside a manhole. It fits openings from 17- to 24- inch in diameter.

Adjustment is simple and quick. Construction is 100% stainless steel for maximum resistance to harsh environments.

For more information, request the ProHanger Product Data Sheet, #L-1115.

For complete information, request the Product Data Sheet, #L-2112.
<table>
<thead>
<tr>
<th>Flow Meters</th>
<th>Other Free Materials</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>❑ 2100 Series Modular Flow Systems</td>
<td>❑ Isco Storm Water Monitoring Guide</td>
<td>❑ I would like pricing information</td>
</tr>
<tr>
<td>❑ ADFM® Velocity Profiling Flow Meters</td>
<td>❑ Flowlink® Program Preview CD</td>
<td>❑ Put me in contact with my Isco representative</td>
</tr>
<tr>
<td>❑ 4200 Series Open Channel Flow Meters</td>
<td>❑ Isco Power Products Brochure</td>
<td></td>
</tr>
<tr>
<td>❑ 3010 Flow Transmitter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>❑ 4501 Pump Station Monitor</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hazardous Locations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>❑ Flow Meters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>❑ Refrigerated Samplers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Name ___________________________________________  ZIP/postcode ____________________________

Title ___________________________________________  Country _________________________________

Company _________________________________________  Phone _________________________________

Address _________________________________________  FAX _________________________________

City ____________________________________________  Email _________________________________

State/Province ________________________________