

DATE: 4/25/2025

INVITATION TO BID
THIS IS NOT AN ORDER

Page: 5

BID NO.: 50-00147613

JEFFERSON PARISH
PURCHASING DEPARTMENT
P.O. BOX 9
GRETNA, LA. 70054-0009
504-364-2678

VENDOR: 27118 BLANK BID COPY VENDOR

PURCHASING SPECIALIST:
TBANKS

As per LSA-RS 47:301 et seq., all governmental bodies are excluded from payment of sales taxes to any Louisiana taxing body. Quotations shall be based on F.O.B. Agency warehouse or jobsite, anywhere within the Parish as designated by the Purchasing Department.

JEFFERSON PARISH reserves the right to cancel all or any part of an order if not shipped promptly. No charges will be allowed for parking or cartage unless specified in quotation. The order must not be filled at a higher price than quoted. JEFFERSON PARISH reserves the right to cancel at any time and for any reason by issuing a THIRTY (30) day written notice to the contractor.

JEFFERSON PARISH is expecting all products to be new and all work to be done in workman-like manner, according to standard practices. Any deviations or alteration from the specifications must be indicated on the bid form for each item and upon request, product data for same must be submitted by the time specified by the Purchasing Department.

DELIVERY: FOB JEFFERSON PARISH	
INDICATE DELIVERY DATE ON EQUIPMENT AND SUPPLIES	<u>Approx. 4 Weeks</u>
INDICATE STARTING TIME (IN DAYS) FOR CONSTRUCTION WORK	<u>N/A</u>
INDICATE COMPLETION TIME (IN DAYS) FOR CONSTRUCTION WORK	<u>N/A</u>

In the event that addenda are issued with this bid, bidders **MUST** acknowledge all addenda on the bid form. Bidder must acknowledge receipt of an addendum on the bid form by placing the addendum number as indicated. Failure to acknowledge any addendum on the bid form will result in bid rejection.

Acknowledge Receipt of Addenda: NUMBER: N/A
NUMBER: N/A
NUMBER: N/A
NUMBER: N/A

LOUISIANA CONTRACTOR'S LICENSE NO.: (if applicable) N/A

*** ALL BIDDERS MUST COMPLETE SECTION BELOW ***	
FIRM NAME: Rocky Mountain Recreation LLC	
SIGNATURE: (Must be signed here) 	TITLE: President
PRINT OR TYPE NAME: Janeil Norman	
ADDRESS: PO Box 68	
CITY, STATE: Albion, ID	ZIP: 83311
TELEPHONE: (208) 670-5079	FAX: () N/A
EMAIL ADDRESS: rockymtnrecllc@gmail.com	

TOTAL PRICE OF ALL BID ITEMS: \$ 18,362.80

INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00147613

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
1	2.00	EA	<p>PURCHASE OF SAMPLING EQUIPMENT FOR JEFFERSON PARISH DEPARTMENT OF ENVIRONMENTAL AFFAIRS PRE-TREATMENT DIVISION</p> <p>0001 Water Quality Monitoring Equipment: Isco #686710070</p> <p>6712 Full-size Portable Sampler. Includes controller, top cover, center section, base, distributor arm, and two pump tubes. Does not include bottle configuration kit.</p>	\$ 7,039.15	\$ 14,078.30
2	2.00	EA	<p>0002 Isco #686700007 24-bottle Configuration for 6700 Series</p> <p>Full-size Portable Sampler. Includes 24 Glass 350-mL round bottles with PTFE lined caps, bottle retaining ring, and two discharge tubes.</p>	\$ 849.85	\$ 1,699.70
3	1.00	EA	<p>0003 Isco #686700014 Single-bottle Configuration for 6700</p> <p>Series Full-size Portable Sampler. Includes one polyethylene 2.5 gallon (10 L) round bottle with cap, tube guide, and two discharge tubes.</p>	\$ 402.50	\$ 402.50
4	1.00	EA	<p>0004 Isco #601684040 Model 934 Nickel-Cadmium Battery.</p> <p>Rechargeable, 12 VDC, 4 amp-hours. For use with ISCO GLS, 3700, 6100, and 6700 Series Portable Samplers; 4200 Series flowmeters; and 150 Portable Peristaltic Pump. Recharge using Model 961 or 965 battery charger.</p>	\$ 515.20	\$ 515.20
5	1.00	EA	<p>0005 Isco #601684088 Model 913 High Capacity Power Pack.</p> <p>Converts 120 VAC, 50/60 Hz to 12 VDC Includes separate output for charging ISCO GLS 3700, 6100, and 6700 Series Portable Samplers; 4200 Series flowmeters; and Signature Portable flowmeters.</p>	\$ 660.10	\$ 660.10
6	2.00	EA	<p>0006 Isco #609004379 3/8 inch ID x 25 ft. long vinyl suction</p> <p>line with standard weighted polypropylene strainer. Includes tubing coupler.</p>	\$ 276.00	\$ 552.00
7	1.00	EA	<p>0007 Transportation Services Shipping Charges</p>	\$ 455.00	\$ 455.00

Isco 6712 Full-size Portable Sampler

Isco's 6700 Series Portable Samplers have set the industry standard, providing the most comprehensive and durable performance available. With the introduction of our new 6712, Isco takes another step toward the ultimate by including SDI-12 interface capabilities.

This full-size portable lets you take full advantage of the advanced 6712 Controller, with its powerful pump, versatile programming, and optional plug-in modules for integrated flow measurement. Setup is fast and simple, with online help just a key stroke away.

The environmentally-sealed 6712 controller delivers maximum accuracy and easily handles all of your sampling applications, including:

- ◆ Flow-paced sampling with or without wastewater effluent
- ◆ stormwater monitoring
- ◆ CSO monitoring
- ◆ permit compliance
- ◆ pretreatment compliance

In the Standard Programming Mode, the controller walks you through the sampling sequence step-by-step, allowing you to choose all parameters specific to your application. Selecting the Extended Programming Mode lets you enter more complex programs.

Optional land-line and GSM and CDMA cellular telephone modems allow programming changes and data collection to be performed remotely, from a touch-tone phone. They also provide dial-out alarm.

Bottle options are available for practically any sequential or composite application.



Versatile and Convenient

With eleven bottle choices, Isco's 6712 Sampler lets you quickly adapt for simple or intricate sampling routines. Up to 30 pounds (13.5 kg) of ice fits in the insulated base, preserving samples for extended periods, even in extreme conditions. The 6712 with the "Jumbo Base" option holds bottles up to 5.5 gallon (21 liter).

Tough and Reliable

The 6712 Portable Sampler features a vacuum-formed ABS plastic shell to withstand exposure and abuse. Its tapered design and trim 20-inch (50.8 cm) diameter result in easy manhole installation and removal. Large, comfortable handles make transporting safe and convenient—even when wearing gloves.

Isco's 6712 Portable Sampler carries a NEMA 4X, 6 (IP67) enclosure rating.

Superior capability, rugged construction, and unmatched reliability make the 6712 the ideal choice for portable sampling in just about any application.

Specifications

Isco 6712 Full-size Portable Sampler	
Size (Height x Diameter):	27 x 20 inches (50.7 x 68.6 cm)
Weight:	Dry, less battery - 32 lbs (15 kg)
Bottle configurations:	24 - 1 Liter PP or 350 ml Glass 24 - 1 Liter ProPak Disposable Sample Bags 12 - 1 Liter PE or 950 ml Glass 8 - 2 Liter PE or 1.8 Liter Glass 4 - 3,8 Liter PE or Glass 1 - 9.5 Liter PE or Glass 1 - 5.5 gallon (21 Liter) PE or 5 gallon (19 Liter) Glass, (with optional Jumbo Base)
Power Requirements:	12 V DC (Supplied by battery or AC power converter.)
Pump	
Intake suction tubing:	
Length	3 to 99 feet (1 to 30 m)
Material	Vinyl or Teflon
Inside dimension	3/8 inch (1 cm)
Pump tubing life:	Typically 1,000,000 pump counts
Maximum lift:	28 feet (8.5 m)
Typical Repeatability	±5 ml or ±5% of the average volume in a set
Typical line velocity at Head height: of	
3 ft. (0.9 m)	3.0 ft./s (0.91 m/s)
10 ft. (3.1 m)	2.9 ft./s (0.87 m/s)
15 ft. (4.6 m)	2.7 ft./s (0.83 m/s)
Liquid presence detector:	Non-wetted, non-conductive sensor detects when liquid sample reaches the pump to automatically compensate for changes in head heights.

Controller	
Weight:	13 lbs. (5.9 kg)
Size (HxWxD)	10.3 x 12.5 x 10 inches (26 x 31.7 x 25.4 cm)
Operational temperature:	32° to 120°F (0° to 49°C)
Enclosure rating:	NEMA 4X, 6 (IP67)
Program memory:	Non-volatile ROM
Flow meter signal input:	5 to 15 volt DC pulse or 25 millisecond isolated contact closure.
Number of composite samples:	Programmable from 1 to 999 samples.
Clock Accuracy:	1 minute per month, typical, for real time clock
Software	
Sample frequency:	1 minute to 99 hours 59 minutes, in 1 minute increments. Non-uniform times in minutes or clock times 1 to 9,999 flow pulses
Sampling modes:	Uniform time, non-uniform time, flow, event. (Flow mode is controlled by external flow meter pulses.)
Programmable sample volumes:	10 to 9,990 ml in 1 ml increments
Sample retries:	If no sample is detected, up to 3 attempts; user selectable
Rinse cycles:	Automatic rinsing of suction line up to 3 rinses for each sample collection
Program storage:	5 sampling programs
Sampling Stop/Resume:	Up to 24 real time/date sample stop/resume commands
Controller diagnostics:	Tests for RAM, ROM, pump, display, and distributor

Ordering Information

Note: Power source, bottle configuration, suction line, and strainer must be ordered separately. Many options and accessories are available for 6712 Samplers; see separate literature for 700 Series Modules and other components to expand your monitoring capabilities. Contact Isco, or your Isco representative for pricing and additional information.

Description	Part Number
6712 Portable Sampler, Full-size Includes controller with 512kB RAM, top cover, center section, base, distributor arm, instruction manual, pocket guide.	68-6710-070
6712 Portable Sampler, with Jumbo Base As described above	68-6710-082



The 6712 Controller is also an SDI-12 data logger, and has many optional capabilities. Please contact Isco or your Isco distributor for more information.



Water is life. Protect it.

Teledyne Isco, Inc.

4700 Superior Street
Lincoln NE 68504 USA
Phone: (402) 464-0231
USA and Canada: (800) 228-4373
Fax: (402) 465-3022
E-Mail: iscoinfo@teledyne.com
Internet: www.isco.com

SECTION []
Teledyne Isco 6712 Full-Size Portable Sampler
Engineering Specifications
Revised: February 22, 2010

PART [] PRODUCTS

1.1 Manufacturer

- A. Wastewater sampling equipment supplied by Teledyne Isco, Inc. 4700 Superior Street, Lincoln, NE, 68504-1398. Phone (402) 464-0231, fax (402) 465-3064, email IscoInfo@teledyne.com, web site www.isco.com.

2.1 Design

There shall be furnished a portable sampler for sequential and composite sampling applications. The instrument shall be capable of collecting samples from a variety of sources including open channels, sewers, and storm water conduits. The instrument shall route samples to storage containers for collection and off-site analysis. The instrument shall be suited to collect priority pollutant or general purpose samples in multiple bottles or a single bottle. The unit shall be capable of either battery or line (AC) power operation.

3.1 Description

A. Physical Description

- 1. The sampler shall be circular in shape with an outside diameter of less than 20 inches (51 cm) and shall be at least 31.5 inches (80 cm) in height. The dry weight of the unit shall not be less than 52 pounds (24 kg).

B. External Construction

- 1. The exterior shall be a light-colored ABS plastic for superior sample preservation, corrosion resistance, and all-weather durability. Other external components shall be constructed of stainless steel, plated aluminum, or other corrosion resistant materials. The base section shall typically hold 30 pounds of crushed ice when using 24 round 350 ml sample bottles to cool samples after collection. The base section and center section shall be a two piece construction and include foamed in place insulation. This external hardware shall provide an insulation value of at least R-10. Large handles for easy transportation shall be located on both the center section and base. A side mounted drain shall allow for the discharge of cooling water. The controller cover shall be designed to allow external equipment to be mounted directly to the cover. The design of the external hardware shall allow easy assembly and disassembly of sampler components. Large spring-loaded latches shall hold the sections together firmly and shall remain in the open position when not attached to the external latch keeper.

C. Sampler Controller

- 1. All electrical components shall be housed in a single controller. There shall be no external electrical or control components. The controller shall use a 4 line, 20 character per line, 80 total character display to show sampler and attached module status and program information. This display shall be angled for easy viewing and backlit for easy use in all light conditions. A 17 position keypad shall be used for all program entries, manual control of the sampler, and data transfer functions. The sealed control unit shall be removable to allow use with either a portable or refrigerated sampler. Program firmware shall be stored in Flash memory. This shall allow program software updates to be transferred to the sampler without opening the sampler enclosure.

2. The control box shall be constructed of 1/4"-thick Noryl® plastic and the enclosure shall conform to NEMA 4X, 6 (IP 67 control box, IP 17 pump) standards for water tight, dust tight, and corrosion resistance and submersion. A desiccator shall be located inside the control box to prevent moisture damage to electrical components.
3. The controller shall have an operating temperature of 32 to 120 °F (0 to 49 °C), and a storage temperature of 0 to 140 °F (-18 to 60 °C).
4. The sampler shall require 12 volt DC power for operation. This power shall be supplied from [(Isco Nickel-Cadmium Battery) (Isco Lead-Acid Battery) (Isco AC Power Converter 120 or 240 volt) (Isco AC Battery-Backed Power Converter) (External user-supplied 12 volt DC power source)]¹
5. The sampler controller shall have two programming modes: standard and extended. Additionally, two styles of programming shall be available: quick view and sequential programming styles. There shall be a sequence available to select either standard or extended programming. On-line help shall be available to direct the user through the programming sequence or refer to specific sections in the instruction manual. The sampler shall provide 512 kilobytes of battery-backed RAM memory with a minimum life of five years. This memory shall maintain the sampler's program settings, stored programs, and the results of the last sampling sequence when the sampler is turned off or an external power interruption occurred. A user-initiated diagnostics routine shall determine the operational status of the sampler. Any error conditions detected by the diagnostic routines shall be displayed to the user.
6. Standard programming shall allow the user to define specific program operational parameters. Additionally, the sampler shall be able to be programmed to operate on specific days of the week. An option shall be available to automatically re-run the active program. No user re-activation shall be required if this option is selected. The user can program the sampler to collect sequential or composite samples at user-definable intervals. A delay to first sample collection shall be programmable in minutes from 0 to 9,999 or by the real-time clock or eliminated. The user shall be able to enter a 10 character alpha numeric description as a sampling site name.
 - a. Time Pacing, Standard Programming
The sampler shall use an internal real-time clock to provide time and date information. Uniform time paced samples shall be collected at regular time intervals from 1 minute to 99 hours and 59 minutes.
 - b. Flow Pacing, Standard Programming
The sampler shall accept a 12V DC flow proportional pulse or isolated dry contact closure from an external flow meter for flow pacing. The pulse or contact closure shall be at least 25 ms in duration. The user shall select the number of flow pulses as the flow interval for each sample collection. If connected to a 700 series flow module, flow pacing shall be stated in interval flow volume between each sample.
7. Extended programming shall allow the user to enter intricate programs for sample collection. All options available in standard programming mode are available with extended programming. The sampler shall have the ability to be programmed for up to 2 real-time pause/resume sampling times. The pause/resume routines and delay to the first sample are independent of the sample pacing interval. The sampler shall be capable of storing up to 5 sampling routines. The duration and frequency of purges can be controlled by the user in this mode. Sample retries and line rinses shall be selectable from 0 to 3. The user shall be able to

- enter a 10 character alpha numeric description as a sampling site name. The user shall also be able to enter 10 character alphanumeric names for each stored sampling program.
- a. Two-part programming shall provide multiple sample pacing for collecting independent samples in distinct bottle sets. This shall be used for storm water runoff monitoring or other applications. Sample volumes and intervals for the independent samples shall be separately programmed. All programming options shall be available for the independent programs. These two distinct programs shall be capable of being initiated separately by external conditions.
 - b. Time Pacing, Extended Programming
The sampler shall use an internal real-time clock to provide time and date information. Uniform time paced samples shall be collected at regular time intervals from 1 minute to 99 hours and 59 minutes. Additionally, non-uniform time interval sampling shall be available. These non-uniform time intervals shall be capable of being paced by clock time, or in specific minute intervals for each sample collected. An additional non-uniform timed sampling mode shall allow the user to enter the number and volume of samples to collect and a time period to complete the sampling routine. The sampler shall then randomly select and record each sample collection.
 - c. Flow Pacing, Extended Programming
The sampler shall accept a 12V DC flow proportional pulse or isolated dry contact closure from an external flow meter for flow pacing. The pulse or contact closure must be at least 50 ms in duration. The user shall select the number of flow pulses as the flow interval for each sample collection. If connected to a 700 series flow module, flow pacing can also be stated in interval flow volume between each sample.
 - d. Flow Dependent Sample Volumes
For extended programs that are uniform time paced, a flow-dependent-sample-volume option shall be offered. If a flow module is attached, the input signal shall be the module's flow volume. Otherwise, it shall be the flow pulse count at the external flow meter connector. The user shall enter the amount of flow required for each 10 ml of sample. At sample time, the sample volume shall be calculated based on the flow that occurred since the last sample. This sample volume will be at least 20 ml, but not more than the bottle volume (or 9,990 ml, whichever is smaller). No sample shall be taken at the start time.
 - e. Event Paced Sampling
This mode of sampling shall allow the user to select specific external events to pace a sampling routine. A sample shall be collected when specific external events occur. Sampling shall take place with each occurrence of the external event.
8. Sampler Controller Outputs
- a. Three optional internal isolated analog outputs shall be available. These outputs shall be configurable to either 4-20 mA or 0-20 mA. These outputs shall be programmable for any parameter measured by the sampler with the exception of rainfall.²
 - b. A serial data output shall be available. ASCII data shall be transmitted at user selectable intervals of 15 seconds, 1 minute, 5 minutes, or 15 minutes. Additionally the data out put can be accessed by sending a specific command to the sampler. Baud rates shall be selectable from: 1200, 2400, 4800, or 9600. At all baud rates, the data shall be sent with no parity, 8 data bits, and one stop bit. Data shall be is in a comma-separated-value format.

- c. There shall be available a programmable input/output (I/O) port that shall initiate a signal, based on monitored events, capable of activating an optional single, dual, or triple contact closure for controlling external devices or signaling other equipment. The signal is a 5 volt CMOS digital signal programmable to activate high or low, based on a programmed TRUE or FALSE condition(s). These outputs shall be programmable through the front panel and can be re-configured by the user.
- d. The 6712 shall track how much power has been consumed since the last time it lost power. The current power consumption, as well as the previous power consumption, shall be accessed by pressing the STOP key while in the main menu. For proper operation, it is the responsibility of the user to use a freshly charged battery when starting the sampler.
- e. For those programs that have delayed or scheduled start times, parameter readings shall be displayed while waiting for the start time. At the start time for the sampling program, the totalizer shall be reset to display total flow information for the sampling program. Parameter and flow readings shall also be displayed after the program is complete. Additionally, the 6712 sampler shall be capable of operating as a display and logging unit only.

9. Command Driven Mode

There shall be provided an operational mode where the sampler shall be fully controlled through an external device. The external controller shall be responsible for determining when to take a sample, how much volume to pump, and where to put the sample. The external controller shall directly interface to the sampler via an RS-232 communications port at 2400 baud, 8 data bits, 1 stop bit, and no parity. A comma-separated-value protocol is used by the external controller to make requests, and by the sampler to report results. At the appropriate time as determined by the external controller, a command is sent to the sampler. The sampler shall move the distribution arm to the appropriate location and collect the volume of sample directed by the controller. After sample collection, the sampler shall signal back to the controller that the sample was successfully captured, or any operational faults that can be detected by the sampler.

D. Sample Delivery

- 1. Samples shall be collected using a peristaltic pump. This pump shall produce typical line velocities of 3.0 feet per second in a 3/8 inch (0.95 cm) ID suction line at 3 feet (1 m) of head. At 25 feet (7.6 m) of head the pump shall typically produce a line velocity of 2.2 feet (0.67 m) per second. The pump shall be capable of lifting a sample 28 feet (8 m). The body of the peristaltic pump shall be an integral part of the sampler controller. The pump shall be constructed of high strength Noryl plastic and designed for corrosion resistance and long tubing life. Before and after each sample is collected, the pump shall air purge the suction line. Pre-purges and post-purges shall be automatically controlled, and no pre-calibration adjustments are required. User selectable purge lengths shall also be available. The sample stream shall be a direct path from sample source to sample bottle. Samples shall not pass through metering chambers or other diversions. The pump shall include a latched cover and thumbscrew opening for the replacement of pump tubing. The pump shall include a built-in safety interlock. With the opening of the pump's latch and band, all power shall be removed from the sampler's pump motor, to eliminate the possibility of a pump activation injuring personnel.
- 2. The sampler shall typically deliver sample volumes with an accuracy of 10 ml or 10%, whichever is greater, of the programmed value. The sample volume repeatability shall be 5

- ml or 5%, whichever is greater, of the average of the maximum and minimum sample volume in the sample set. The user can select sample volumes from 10 to 9,990 ml in 1 ml increments. The liquid detector also monitors for anomalies in the sample collection process. If no liquid is detected, the sampler shall be capable of retrying the sampling sequence up to three times. Additionally, the sampler shall be capable of being programmed to rinse the suction line with the source liquid up to three times.
3. Liquid Detector
The sampler shall utilize a non-wetted, non-conductive detector to sense the presence of the liquid. The sensor shall not be dependent on, or affected by, the chemical or physical properties of the liquid or its contents. The sensor shall not require routine maintenance or cleaning. The liquid detection system shall minimize the effects of changing head, intermittent flow in the suction line, or variable battery conditions on sample volume. After initial detection of liquid, the sensor shall monitor for the presence of liquid during the sample collection sequence. Additionally, the liquid detector shall be used to detect bottle full conditions when the sampler is operated in the single bottle sampling mode.
 4. Pump Revolution Counter
After liquid detection, the pump revolution counter shall count actual pump revolutions to determine sample volume delivery to the storage containers. If liquid flow is interrupted during the sample collection sequence, the detector shall inhibit the pump revolution counter from incrementing until liquid flow is restored. Automatic compensations for air slugs in the sample shall be made by the delivery system. Additionally, the pump revolution counter shall monitor the total number of pump revolutions and alert the user when a pre-selected number of counts has been reached. This tubing life indicator shall alert the user to the need to replace the pump tubing. This indicator shall be on the sampler's display screen. The pump tubing used shall be specially treated to minimize water extractable pollutants. Specially designed bands shall indicate the correct placement of the tubing inside the pump. The tubing shall typically last for a minimum of 1,000,000 pump counts. One pump revolution is equivalent to 12 pump counts.
 5. Sample distribution shall be through the use of a worm gear drive mechanism. This system shall lock the corrosion-resistant distribution arm above the appropriate sample container. A dual optical sensor shall be used for positive location of the distributor arm. A single adjustable distributor arm shall be used for all bottle configurations and sampler mounting possibilities.
 6. The sampler program shall allow the user to select from 3 types of sample distribution: samples per bottle, bottles per sample, and multiple bottle compositing. In the samples per bottle mode, a minimum of 15 samples shall be capable of being deposited in each sample container. In the bottles per sample mode, all sample bottles shall be capable of being filled with a single initiation. Multiple bottle compositing shall allow the user to place multiple samples in a single bottle while simultaneously creating a duplicate bottle or set of bottles. The sampler shall switch bottles after a period of time has elapsed, or a predetermined number of samples have been collected.
- E. Suction Lines and Strainers
The sampler shall require a suction line and strainer. The suction line shall be made of {[3/8 inch (.95 cm) ID vinyl] [3/8 inch (.95 cm) ID Teflon®] with a length of _____ feet}.³ [An optional (all stainless steel strainer for 3/8" (.95 cm) line) (all CPVC weighted strainer for 3/8" (.95 cm) line) shall be supplied].⁴

F. Sample Collection Containers

The sampler shall be supplied with sample collection container(s). The container(s) shall be [(24 wedge 1 liter polypropylene) (24 round 350 ml glass) (12 round 1 liter polypropylene) (12 round 950 ml glass) (8 round 2 liter polyethylene) (8 round 1.8 liter glass) (4 round 3.7 liter (1 gallon) glass) (4 round 3.7 liter (1 gallon) polypropylene) (Single 9.4 liter {2.5 gallon} polyethylene) (Single 9.4 liter {2.5 gallon} glass) (24 ProPak polypropylene holders and disposable 1 liter low-density polyethylene sample bags) (single vented polyethylene container and disposable ProPak 2 gallon low-density polyethylene sample bags)]⁵

G. Interfacing Options

1. Model 581 Rapid Transfer Device (RTD)

There shall be provided a hand-held device for transferring data from the 6712 sampler. This information shall be in the form of daily summaries of the sampling data and other external sensing devices accompanying the 6712 sampler. The 581 shall typically store reports from up to 25 samplers. The unit shall be housed in a totally encapsulated polyurethane housing. The 581 shall meet standards for NEMA 4X, 6 (IP 68) standards for water-tightness. The communications protocol shall use a RS-232 serial communications, transmitting at 9600 baud. The total data storage capability shall be 967 Kbytes.⁶

2. Model 2102 wireless module

There shall be provided a wireless communications module to communicate with a personal computer. This device will communicate similar to that of a direct connection to the sampler without the communications cable. The user can download all stored information from the 6712 for later manipulation.⁷

3. Personal Computer Software (Samplink)

There shall be provided software that shall allow two separate reports to be transferred to an IBM compatible computer: sampling results report and a program settings report. The program shall include fail-safe loading with site ID codes to prevent field errors due to multiple files.⁸

4. 674 Rain Gauge

There shall be provided a tipping bucket rain gauge for measurement of on-site rainfall amounts. The unit shall connect directly to the 6712 controller and data is stored at the storage interval rate. The 674 shall be available for use with SDI-12 sensors also connected to the sampler.⁹

5. YSI SDI-12 Sonde

The sampler controller will include an SDI-12 input interface. The controller will function as a SDI-12 logger. A maximum of 10 input devices can be attached to the sampler controller. A maximum of 8 parameters from the sensors which may include multi-parameter sondes can be stored in the controller's memory, and an additional 8 parameters can be used for program initiation or event-paced sampling. The controller shall accept Teledyne Isco compatible sondes with a minimum of additional programming. Compatible, non-Teledyne Isco SDI-12 sensors must be programmed for the type of parameter and units selected for measurement.¹⁰

H. Communication Options

1. Internal Phone Modem

The 6712 shall be compatible with an internal phone modem. This landline analog modem shall operate at a transfer speed of 2400 Baud. The modem shall be capable of enabling the transfer of stored data from the 6712 sampler to a PC, and alarm information via telephone.

In addition, software shall be available to enable the sampler to accept remote commands via the modem. These shall include: Sample program initiation, taking a sample, selection of stored program to operate, or the end of a sampling routine.¹¹

2. CDMA Modem

The 6712 shall be compatible with an external digital cellular CDMA modem for issuing alarm information in the form of digital text messages via dialup server to cellular phones. Remote operation shall be possible through a computer command program such as Hyper Terminal. An external digital modem is available from Teledyne Isco.¹²

3. TDMA Modem

The 6712 shall be compatible with an external digital cellular GSM modem for issuing alarm information in the form of digital text messages using SMS to cellular phones. Remote operation shall be possible through a computer command program such as Hyper Terminal. An external digital modem is available from Teledyne Isco.¹³

I. ProHanger Suspension Bracket

A stainless steel extendable bracket assembly shall be furnished for suspension of the sampler in manholes 18 to 24 inches in diameter. The bracket shall be rated to 200 pounds.¹⁴

® - E.I. DuPont de Nemours Co.

™ - General Electric Co.

¹ Specify one or more power sources as required

² Specify optional internal analog outputs.

³ Specify length and material for sampler suction line

⁴ Specify type of strainer for sampler suction line

⁵ Specify bottle or bottles required

⁶ Specify 581 rapid transfer device.

⁷ Specify 2102 wireless communication module.

⁸ Specify software and required connect cable for computer

⁹ Specify tipping bucket rain gauge.

¹⁰ Specify YSI parameter sonde.

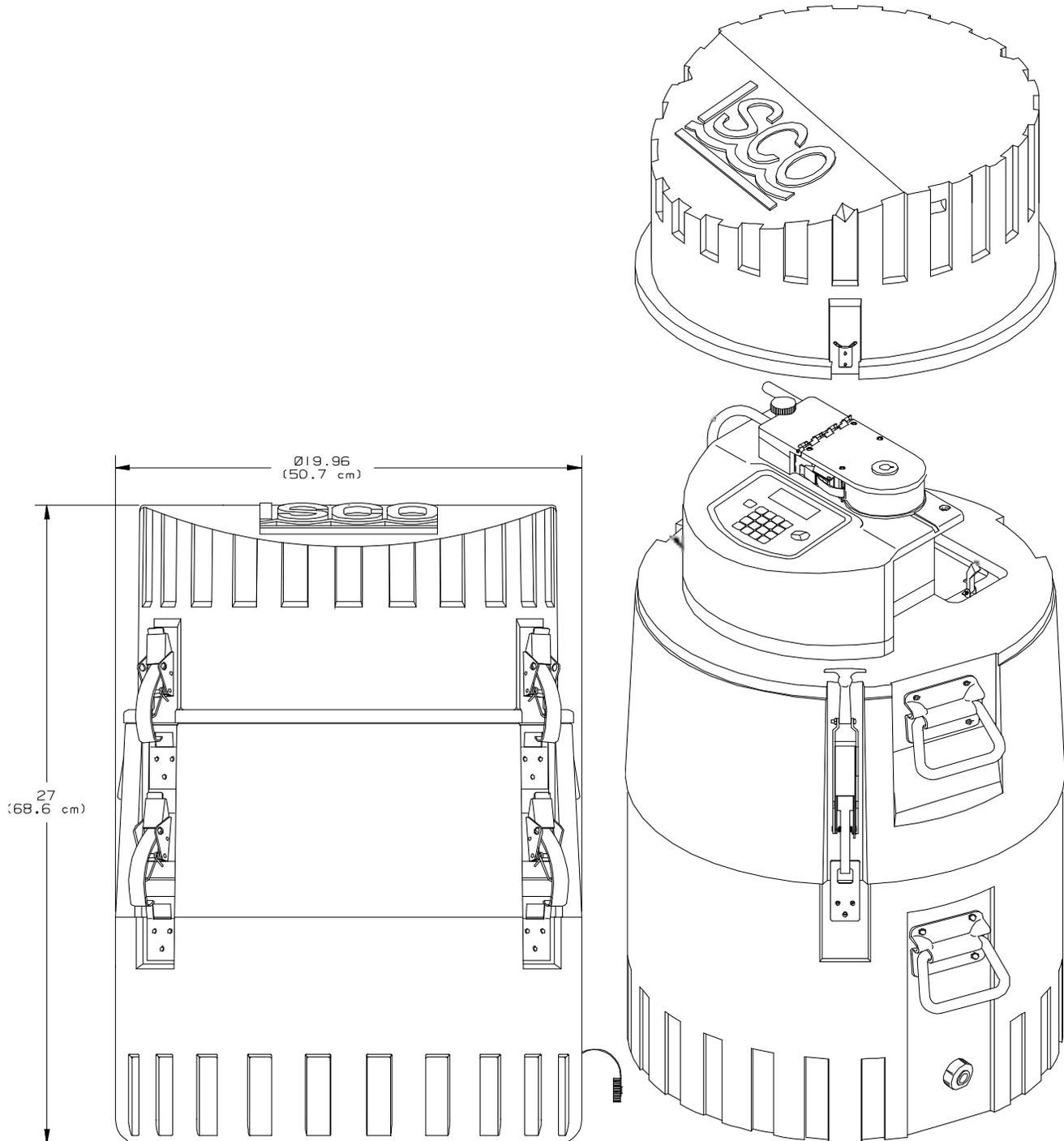
¹¹ Specify 4200T telephone modem.

¹² Specify CDMA cellular modem.

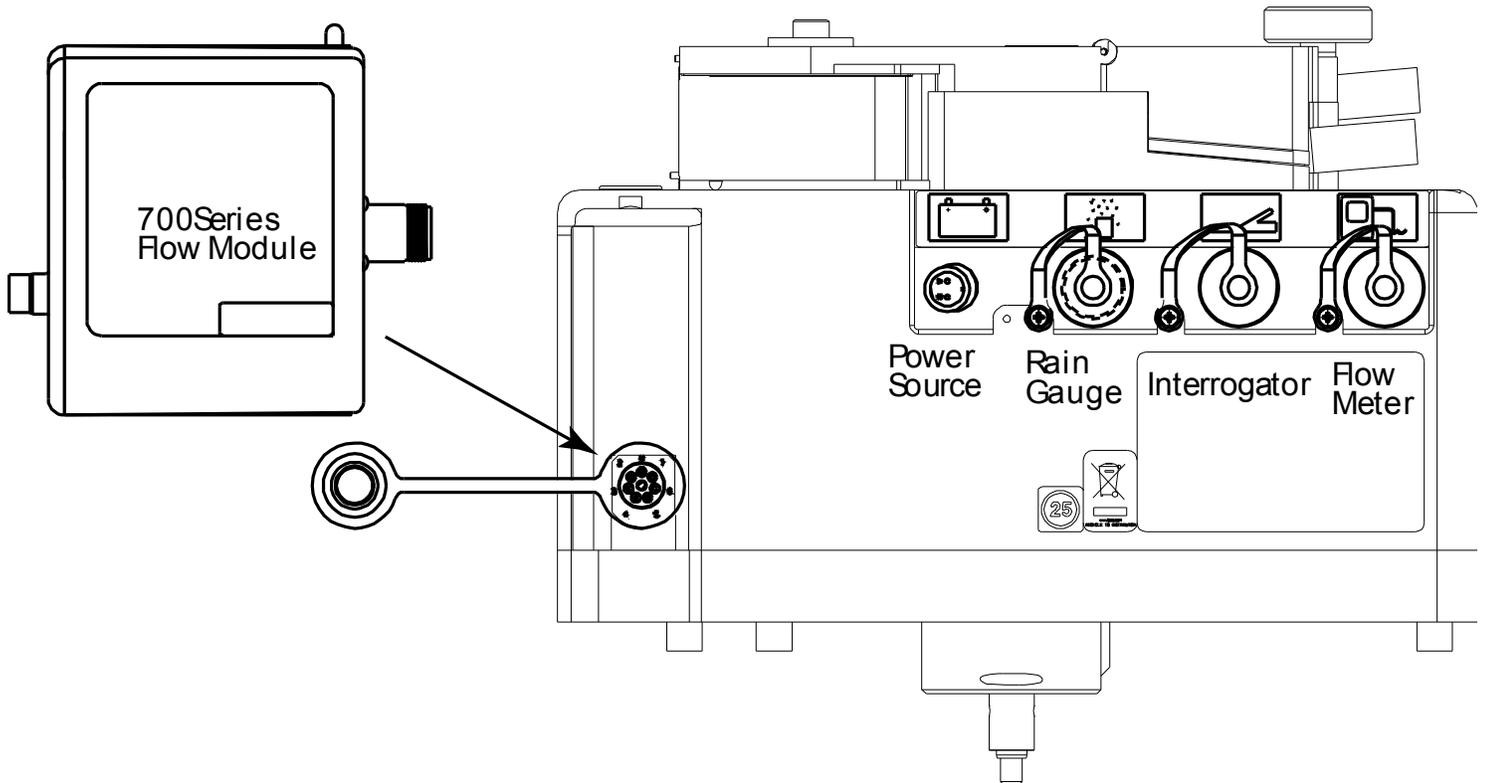
¹³ Specify GSM cellular modem.

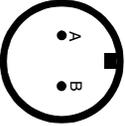
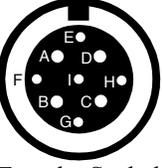
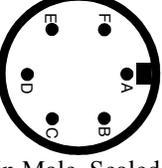
¹⁴ Specify ProHanger manhole suspension bracket.

6712 Full Size Portable Sampler

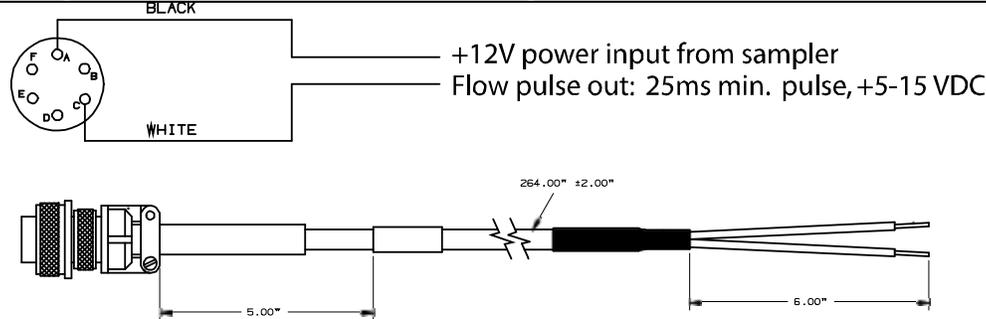


6712 Controller Connectors (see table for pinouts)

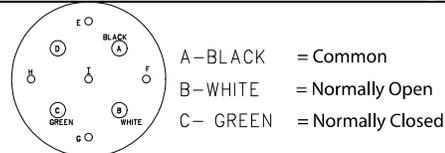


Connector	Pin	Function	Details
Power Source  2-Pin Male, Sealed	A GND B +VIN	Ground +12 volts	DC power return DC power supply
Rain Gauge / 947 I/O Alarm Box  9-Pin Female, Sealed	A +12V B GND C I/O1 D RAIN E SW12SPA F XCV G XMT?? H I/O2 I I/O3	+12 volts Ground I/O1 Rain gauge tip Power out SDI-12 Data ?????????????? I/O2 I/O3	DC power output DC power return Programmable pin DC input or output signal Receives 48 ms, 0VDC pulses Switched DC output (SPA only); normally N/C Serial input or output signal Serial output signal?? Programmable pin DC input or output signal Programmable pin DC input or output signal
Interrogator  6-Pin Female, Sealed	A SW12 B GND C SENSE D XMT E RCV F N/C	+12 volts Ground Connection sense Transmit Receive No connection	Switched DC power output DC power return DC input signal Serial output signal Serial input signal N/A
Flow Meter  6-Pin Male, Sealed	A +VIN B GND C FPULSE D BTL# E EVENT F INHIBIT	+12 volts Ground Flow pulse in Bottle number out Event mark out Inhibit in	DC power output DC power return 25ms (minimum) pulse, +5 to 15 VDC Pulsed output signal/dual sampler out 3S,+12 VDC pulse @ beginning of sample DC input signal

Sampler to Non-Isco Flow Meter Cable, part #60-1394-077:



SPA 947 1-Channel Alarm Box, part #60-5304-947:



ProHanger Manhole Suspension Bracket

