# Isco 6712FR Fiberglass Refrigerated Sampler

The 6712FR is a sequential or composite refrigerated sampler designed for indoor or outdoor applications where rugged, corrosion-resistant construction is required. The extensive range of programming modes lets you select the most suitable routine for your application. Programming is fast and simple, with on-line help just a key stroke away.

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

- wastewater effluent
- stormwater monitoring
- CSO monitoring
- permit compliance
- pretreatment complience

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.

#### Factory installed options

An optional built-in telephone modem lets you change programs and download data remotely, from a touch-tone phone. It also has dial-out alarm features.





For automatic documentation of sample storage temperature, specify the 6712FR with optional temperature sensor. With this thermally ballasted sensor, the 6712 controller can log compartment temperatures at programmable intervals with 0.1°C precision.

#### Versatile, Tough, and Reliable

Isco FR samplers feature a corrosion-proof refrigerator cabinet molded from polyester resin fiberglass and supported by a stainless steel frame. A UV-resistant gel coat provides a smooth, non-porous finish for added protection and easy cleaning.

The 6712FR uses thick, foamed-in-place insulation to keep samples preserved at the EPA-recommended 39°F (4°C). An automatically controlled, built-in heater ensures that samples won't freeze, even when ambient temperatures drop to -20°F (-29°C). Coolant is environmentally safe R134a. Durable powder-coated epoxy, phenolic paint, and polyester tubing, protect refrigeration components against corrosion.

The 6712FR provides long service life in corrosive environments, and can be used outdoors without an enclosure.

### **Specifications**

| Isco 6712FR                                 |   |  |
|---|---|--|
| Size (HxWxD):                               | 49.3 x 26 x 26 inches (125 x 66 x 66 cm)  |  |
| Weight:                                     | Dry, 160 lbs (73 kg)  |  |
| Bottle configurations:                      | 24 1-liter PP or 350-ml glass 24 ProPak 1-liter disposable sample bags 12 2.5-liter wedge PE 8 2-liter PE or 1.8-liter glass. 2 2-gallon (7.5-liter) PE or 2.5-gallon (9.4-liter) glass 1 2.5-gallon (9.4 liter) PE or glass 1 4-gallon (15-liter) PE 1 5.5-gallon (21-liter) PE or 5 gallon (19 liter) glass |  |
| Refrigerator Body                           | Fiberglass reinforced plastic with UV-resistant gel coat  |  |
| Power Requirements:                         | 120 VAC, 60 Hz; or 240 VAC, 50 Hz (specify)   |  |
| 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<br>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, random interval 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: 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.

| Description  | Part No.    |
|--|-------------|
| 6712FR Refrigerated Sampler, 120VAC 60Hz Includes controller, distributor arm, instruction manual, pocket guide. | 68-6710-072 |
| 6712FR Refrigerated Sampler, 230VAC 50Hz includes controller, distribution arm instruction manual, pocket guide. | 68-6710-073 |
| 6712FR with temperature logging, 120VAC 60Hz<br>As above, with internal temperature sensor                       | 68-6710-144 |
| 6712FR with temperature logging, 230VAC 50Hz<br>As above, with internal temperature sensor                       | 68-6710-145 |



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.



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