



Model 2100

The Spectra Technologies 2100 Series portable remote sampler offers advantages in remote sampling technology that have never been available. A true all-weather unit, the 2100 series incorporates an advanced compressor type refrigeration system and dual zone heating system. No ice is required, no frozen or spoiled samples. The dual zone heating system keeps both the sample chamber at the desired temperature and the pump housing above freezing so that the pump hoses and associated electronics are maintained at temperature that ensures proper operation in below freezing conditions. This configuration allows the user to use the sampler year around. The Series 2100 can be left in place when ambient air temperature range from -25° F to 122°F.

Combined with an optional solar panel power source, the battery can be maintained without the need for removal and charging away from the unit. The compressor- based refrigeration unit provides reliable cooling under a wide range of environmental temperature conditions. When required, the internal heating system works in conjunction with the cooling system to maintain sample the temperature as desired. The Model 2100 is microprocessor controlled and fully programable to meet the user's needs.

Specifications

Refrigeration Type: Compressor based

Heating System Type: Dual Zone (sample chamber and pump\electronics housing, 2 channel controller, Peltier.

Programmable setpoints.

Discrete or Composite based on model

Time or Flow Based Sampling

Pump Type: Peristaltic 0.75 GPM (3.4L/min)

Suction Height: 9.85 Ft (3.0M) @ 0.75 GPM (3.4 LPM), 19.68 Ft. @ 0.48 GPM (2.2 LPM)

Sampling Error: $\pm 2\%$

Repeat Sampling Accuracy: $\pm 5\text{ml}$.

Horizontal Suction Head: 164.0 Ft. (50m).

Sampling tube has automatic rinse and purge function.

Sampling Bottle: 7500 ml for composite, 12 x 500ml Polyethylene bottles for discrete

System clock time control error $\Delta 1 \leq 0.1\%$ and $\Delta 24 \leq 30\text{S}$

Air tightness of pipeline system: $\leq -0.05\text{MPa}$.

Mean time Between Failure (MTBF): $\geq 1440\text{h}$

Insulation resistance: $> 20\text{M}\Omega$.

Program lock can be set protect programs from modification.

Save a maximum 10 programs according to needs.

Automatic data logging of sample cycles. Historical data can be analyzed based this data and sample test results.

Working temperature: -25°F (-31.6°C to 122°F (+50°C)

Power: 120 VAC (with Adaptor) 12/24 VDC, Direct with 12 Battery or optional solar panel. 108 watts (with all systems operating).

Size: 22" (580mm) (L), 12.0" (310mm) (W) x 520mm(H); Weight: 33 lbs. (15Kg)

Enclosure: High impact ABS

Model 2150 Discrete Sampler

The Spectra Model 2150 portable sampler offers all the same all-weather features of the Model 2100, but in a discrete sampling package.



The 2150 utilizes a 12- bottle configuration and static distribution arm which allows the user to take discrete samples with volumes up to 250 ml. Fully programmable, the Model 2150 offers the ultimate unit for remote sampling projects. The light-weight unit is ideal for remote, unmonitored sampling. The unique refrigeration and heating system designed into the Model 2150 ensures sample integrity from -25 °F to 122 °F. This feature allows the user to perform sampling throughout the year no matter what ambient temperature conditions are encountered.

The model 2150 can be powered by 120 V.A.C. with the supplied power adapter, 12 VDC battery (M27 deep cycle recommended) or the 2195 solar panel power source for no battery maintenance operation.

Model 2195 Solar Power Source



The Model 2195 Solar power option provides unlimited power for your 2100 or 2150 portable sampler. A robust 25-watt solar panel, 10-amp charge controller is supplied in a NEMA 4X (IP-67) all weather fiberglass enclosure that also provides storage space for batteries up to M27 size (Battery is not supplied).



The 2195 solar panel power package is a quick and reliable method to power your sampler when other power sources are not available.

Pictures shown are representative and may have a different appearance than those that are supplied base on availability at the time your order is processed.

