

General Oceanics – Water Sampling

Model 1018 Rosette Sampling System

The successor to the widely acclaimed 1016 Sampling System provides ease of operation along with low power operation. A revolutionary design in underwater electronic packages allows the 1018 Rosette Sampler to simplify the integration of sampling systems. The largest oceanographic packages to millilitre sized coastal samplers benefit from General Oceanics continuing effort to provide proven sampling reliability with tomorrow's technology.



A Stingy Performer

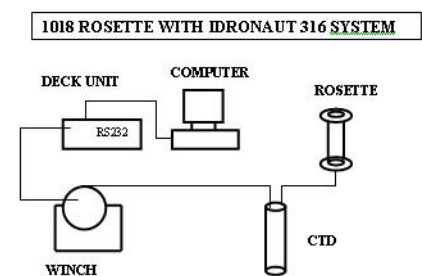
With as little as seven and one half watts maximum power required (on approved sea cable with deck unit) the Model 1018 in conjunction with General Oceanics' Windows based control program, "Rose-Soft", provide the user with monitored reliable sampling as well as the rugged design and performance that users expect from the real 'Rosette' water sampler.

Simple Configuration

The three main modes of operation of the Model 1018 provide a variety of options for the user to optimize their sampling programs. Whether using the Model 1018 in a standalone mode with the MK Deck Unit, with an integrated CTD, or in the autonomous mode (without conducting cable) using its own sensors; the 1018 is capable of sensing its own configuration. The user's time is spent analysing the results rather than configuring the system. Gone are the hours spent configuring your system only to find out you're missing one of the cables or your accessories are incompatible. Simply plug in your cable and the 1018 intuitively knows how you want to use it (in the autonomous mode you'll have to enter your sampling criteria, but "Rose-Soft" makes that easy also). If you can use a cellular phone chances are you'll have no trouble using the Model 1018 Sampler.

Replacement Ease

Like its predecessors, the Model 1018 Sampling System is compatible with all previous assemblies. Replacing an existing 1015, 1016 or other sampler module with the 1018 is an easy chore for even the non-mechanical user. The Model 1018 is shipped with a sea cable interface cable, for standalone use if required, and an interface cable for the CTD of your choice. Another accessory included is the monitor and RS232 interface (including cables) which allows the user to configure custom firing tables. Use this when you have the pressure, temperature and time release options and when you condition the battery before autonomous use.



Model 1018 workhorse

The Model 1018 with twelve, twenty-four and thirty-six sampling positions and is capable of handling up to thirty litre bottles (12 litre maximum on 36 position). For over thirty-five years the 'Rosette' sampler has shown that its rugged construction and reliability is the sampler of choice. Continuing to build longevity into our samplers has been General Oceanics' legacy and is forefront in the Model 1018 by using the same reliable triggering mechanism that sustained previous intelligent 'Rosette' models for almost fifteen years. Why depend on flimsy latches when positive retention and release are an industry standard. This reliability is now augmented by more efficient use of power with state of the art electronic technology. Couple the Model 1018 to any model Idronaut CTD (model 316 to 320), or any compatible CTD of your choice, and enjoy the ease of operation and reliable sampling our customers have come to expect.

Model 1018M Mini-Sampler

Don't need large volume samplers? The Model 1018M mini-sampler performs like its big brother but handles sampler sizes of 30ml, 60ml, 500ml, 1.2L, 1.7L, 2.5L and 5L (6 only). Same configurations available and integrates with the Idronaut CTDs as well as other brands. Use this model to full cable depth.

LW Model 1018M Sampler 500mL-6.0L

Using a smaller vessel and can't handle a large sampling payload? Here's the answer! The Model 1018M Light Weight sampler won't take you down to the ocean floor, but it will give you the flexibility of off-shore and coastal work with a lighter payload. Use it for estuary and river sampling! If you're sampling in less than 1500 meters (4900 ft.) then consider the Light Weight 1018 for the same ruggedness and reliability of its big brothers. Integrate an Idronaut 320 CTD for accredited profiling.



Mini-Sampler
30-60mL



Removable Sampler Tray



No Lanyards Required
For Water Bottle Loading!

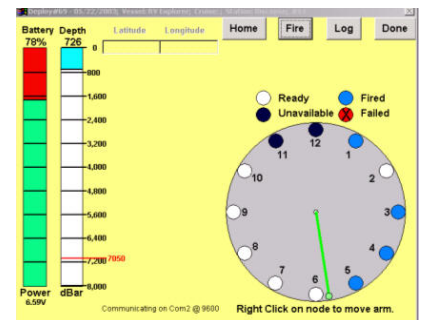


EZ- Push Button
Lanyard Loading



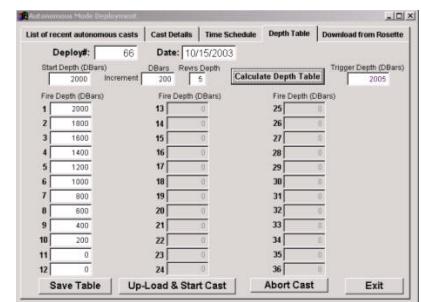
Rose-Soft

Rose-Soft software is designed to interface with General Oceanics Model 1018 series Intelligent Rosettes. Rose-Soft is an interactive software program, which allows the user to trigger water bottles in real time, or to program the Rosette to trigger bottles autonomously, using time or pressure variables. Rose-Soft is intended to be used to operate standalone Rosettes that are not interfaced with a CTD. If the Rosette is used with an Idronaut CTD, use Idronaut's REDAS Software, for other CTDs use the manufacturer's supplied software.



Autonomous Operation

Pressure, Temperature and Timed sampling are part of the Autonomous option. This includes sensor(s), flash memory, real time clock and a dedicated communication port integrated inside the Model 1018, 1018M or LW1018M samplers. No extra housings, cables or mounting brackets required; all neatly tucked inside the 1018 pressure housing and automatically initialized when you plug in the cable. Use "Rose-Soft" control software to setup cast criteria, firing tables and monitor power availability. Upload your data to the sampler and prepare to deploy. After deployment download your cast logs from the sampler to your computer and prepare for another cast. Communicating with Model 1018 is performed on the same cable that can be used to charge the battery. The sampler is capable of taking over 100 water samples (bottles) with a fully charged battery and has a continuous "on" time of over 1000 hours (@30mA).



The screenshot shows the 'Autonomous Mode Deployment' window. It includes a 'List of recent autonomous casts' table, 'Cast Details', 'Time Schedule', 'Depth Table', and 'Download from Rosette' options. The 'Depth Table' is the main focus, showing a grid of data for 12 depth points.

Start Depth (dBar)	Increment	Reels Depth	Trigger Depth (dBar)
2000	200	6	2005
1	13	25	
2	14	26	
3	15	27	
4	16	28	
5	17	29	
6	18	30	
7	19	31	
8	20	32	
9	21	33	
10	22	34	
11	23	35	
12	24	36	

Buttons at the bottom include 'Save Table', 'Up-Load & Start Cast', 'Abort Cast', and 'Exit'.