

# World's Most Capable Oceanographic Beacon

## SUBMERSIBLE IRIIDIUM GPS LED FLASHER BEACON

The Apollo is an independently powered, self-contained GPS and Iridium communications recovery beacon with the power of an ultra-bright LED Flasher. Get notification of the Apollo's arrival at the surface from anywhere on Earth via the Iridium Low Earth Orbit satellite communication system. Once you arrive on site, the LED flasher will provide unparalleled visibility, even in the worst conditions.

The Apollo is fully submersible and has been rated to 11,000 m (36,089 ft) below sea level. During surfacing events, the water sense detection circuit provides a measure of reliability unavailable in mechanical methods. Simply put, the Apollo provides superior functionality and flexibility in a miniaturized package.

### Key Features

- Iridium transceiver to send accurate GPS locations
- 2-way command & control
- Three sizes: Apollo, Apollo-3, and Apollo-Mono
- Long lasting operational life
- Pressure tolerant antenna made of titanium and glass
- Configuration control via smartphone with Bluetooth
- Flexible activation options: Reed switch, tilt switch, and conductivity water sense

The Apollo's LED flasher and Iridium communication provide the best combination in global and local retrieval options for a deepwater submersible beacon. All Xeos products are fully backed by a comprehensive warranty and excellent support.

# APOLLO



## **Xeos** Technologies Inc Data Telemetry Specialists

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# APOLLO

## TECHNICAL SPECIFICATIONS<sup>1</sup>

### Apollo Models

#### APOLLO

<i>Battery Supply</i>	7 D cell alkaline batteries
<i>Length</i>	52.91 cm (20.83")
<i>Weight in air</i>	3637 g
<i>Weight in water</i>	2562 g
<i>Depth Rating</i>	11,000 m
<i>Sleep Current</i>	30 µA
<i>Transmit Current</i>	60 mA (avg. 30 sec)

#### APOLLO-3

<i>Battery Supply</i>	3 SAFT LSH20 D-cell batteries
<i>Length</i>	28.32 cm (11.15")
<i>Weight in air</i>	1839 g
<i>Weight in water</i>	1264 g
<i>Depth Rating</i>	11,000 m
<i>Sleep Current</i>	30 µA
<i>Transmit Current</i>	60 mA (avg. 30 sec)

#### APOLLO-MONO

<i>Battery Supply</i>	1 SAFT LSH20 D-cell battery
<i>Length</i>	14.66 cm (5.77")
<i>Weight in air</i>	590 g
<i>Weight in water</i>	280 g
<i>Depth Rating</i>	6,000 m
<i>Sleep Current</i>	35 µA
<i>Transmit Current</i>	120 mA (avg. 30 sec)

### Apollo Deployment Example

#### Subsurface Deployment of 1 year

Lifetime at surface:

Apollo: **104 days**

Apollo-3: **76 days**

Apollo-Mono: **50 days**

GPS position interval of 1 hour

Iridium message interval of 1 hour

Flasher setting of 1 flash every 10 seconds

### Functionality

<i>Base Function</i>	2-way Iridium communication
	GPS Location & transmission of data
	Ultra Bright LED Flasher

### LED Technology

<i>LED</i>	3 watts, single emitter type
	Flash Options: 1 to 4 flashes; adjustable intervals (1-60 sec)

### Communications

<i>Iridium</i>	9603 Iridium Transceiver, SBD
<i>Antenna</i>	Xeos proprietary antenna, designed to withstand extreme pressure environments
<i>Local</i>	Bluetooth Low Energy (BTLE)

### Environmental

<i>Operating Temperature</i>	-20°C to +60°C
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### Compatible with

<i>XeosOnline™ Console</i>	Web-based control & tracking
<i>XeosBeacon App</i>	Diagnostics and Commands

### Mechanical

<i>Diameter</i>	5.08 cm (2.00")
<i>Material</i>	Titanium with a glass dielectric antenna component
<i>End Cap</i>	Screw off, O-Ring sealed

### Apollo-Remote Head Option Available:<sup>2</sup>



<i>Power Supply</i>	6-20 VDC, External power supply required
<i>Dimensions</i>	10.31 cm L x 5.08 cm D (4.06" L x 2.00" D)
<i>Weight</i>	557 g - out of water
<i>Depth Rating</i>	7500 m

<sup>1</sup> Technical Specifications subject to change without notice.

<sup>2</sup> Cables and submersible battery packs also available.

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