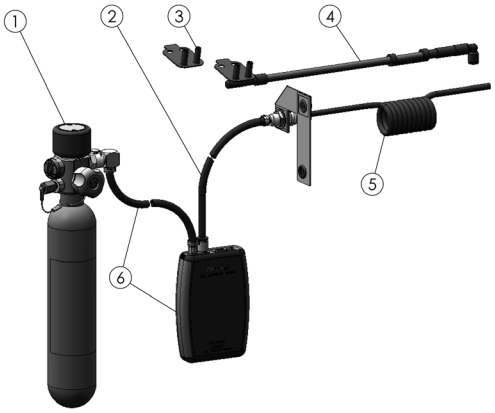
PRODUCT DESCRIPTION

The Portable Helicopter Oxygen Delivery System **(PHODS)** is a man-mounted oxygen system that can be attached directly to a crew member's flight vest and helmet to support flight and ground missions at high altitudes. The oxygen cylinder is a 3AA 4130X steel cylinder that is placed in a pocket made from flame-resistant material and mounted on the flight vest. The oxygen is delivered from the cylinder with a first stage regulator to the user through a rubber nasal cannula or face mask. Oxygen delivery is managed by the OPC-M1 Pulse Demand Oxygen unit, powered by two AA batteries. The Oxygen Pulse Controller (OPC) automatically provides a predetermined amount of oxygen when it senses a pressure differential caused by the user's breathing. The OPC-M1 regulator has an internal barometer to detect altitude and becomes active and de-active at preset altitudes. When the system is turned on, it becomes active/delivers oxygen above 10,000 feet (ft) pressure altitude (PA) and stops delivering oxygen when the altitude drops below 8,500 ft PA. The **PHODS** is designed for AH-64, UH-60 and CH-47 crews and for altitudes up to 18,000 ft. (Refer to U.S. Army Doc. AR 95-1 for usage and aeromedical requirements.)

PHODS is packaged in an environmentally sealed storage case



Optional **PHODS** oxygen mask

102935 - PHODS, O2 SYSTEM, STEEL CYLINDER

SEQ	PART NO.	QTY	DESCRIPTION
1	102940	1	REGULATOR, PHODS, STEEL CYL.
2	102958	1	HOSE ASSY., OPC OUTLET, PHODS
3	102906	1	NOSEPIECE, PHODS, (1/PK)
4	102980	1	CANNULA ASSY., W/O CLIP
5	102957	1	HOSE ASSY., 6MM COILED, PHODS
6	102970	1	CONTROLLER OPC-M1 WITH HOSE, PHODS
7	102916	1	POCKET, UBD-AW, UC, AERIAL #1005866-3
8	102905	1	POCKET, OPC-PHODS, UC
9	102933	1	CASE, STORM W/FOAM, PHODS 02 SYSTEM

SPECIFICATIONS

Maximum respiration rate: The OPC M1 at power up will allow up to 20 BPM. As the user breathes faster, the unit will compensate and allow up to 45 BPM.

Apnea time-out: Approximately 30 seconds. Apnea alarm will flash a green LED in the "**ON**" **mode if your actual pressure altitude is below the 10,000 ft. altitude setting and/or you are not breathing normally through the cannula or mask.**

Operating inlet pressures: 15 -25 psi. At higher inlet pressures the valve may open to relieve the pressure and the unit will not operate correctly.

Battery type: 2 Standard AA alkaline DURACELL type MX1500 or equivalent.

Operating Voltage: 3 VDC

Low-Voltage Warning: 4 ~ 8 hours remaining - 1 flash of the Green LED every 2 seconds.

Extreme Low-Voltage Warning: 1 ~ 2 hours remaining - 2 flashes of Green LED every 2 seconds. Batteries must be replaced as soon as practical.

Dead Battery Warning: 2 flashes of Green LED and 2 audio beeps every 2 seconds. OPC M1 Stops delivering oxygen. Batteries must be replaced IMMEDIATELY.

Battery Life: 100 Hours @ 25 C. operating, assuming fresh alkaline batteries under normal conditions.

Storage: The OPC M1 will not draw any current during storage while in the "**OFF**" setting.

Physical characteristics

MH OPC M1 unit:

Width: 3.15" (8.0 cm.)

Height: 5.25" (13.2 cm.) enclosure and ports

Depth: .93" (2.23 cm.)

Weight: 8.2 oz. (0.233 kg.) with batteries

PHODS Regulator and Cylinder

Pressure Rating: 2100 psi (145 bar)

Capacity:1.7 Cu Ft (48.36 Liters)

Floodable Volume: 20.4 Cu.In. (.334 liters)

Height: 12.00" (30.48 cm) [Cylinder-9.25"(23.5 cm) & Regulator-2.75"(6.99 cm)]

Diameter: 2.00"(5.08 cm)

Weight: Empty 2.47 lbs (1.12 kg.) Full approx. 2.5 lbs (1.13 kg)

Testing and characterization was done under normal operating conditions i.e. 77ºF / 25ºC and responding to a respiration rate of about 15 breaths per minute. Specifications are subject to change without notice.