

## Summit Standard System - In General

### System Overview



The Summit Standard System is the most efficient and lightweight supplementary oxygen system in the world for use by extreme high altitude mountaineers.

It consists of the following main components:

- Himalayan Summit 4-ltr Oxygen Cylinder
- Himalayan Regulator  
(Two flow ranges available - upto 4-lpm and upto 6-lpm)
- Himalayan Facemask  
(Three mask sizes (small, medium and large) and two reservoir volumes (100ml and 200ml) available)

Summit Standard System shown with a medium size facemask, identified by the red oxygen delivery hose

## Summit Standard System - In Detail

### Himalayan Summit Oxygen Cylinder



Summit Oxygens Himalayan Summit oxygen cylinder is the lightest oxygen cylinder in the world with a working pressure of 300bar. The cylinder has a 20year design life and can be refilled 5000 times.

We are the only company that fills our cylinders from a source of liquid oxygen. The reason for using a liquid oxygen source is because it gives us total control over the moisture content of the gas. It also allows us to guarantee the purity of the oxygen.

The cylinder valve comes with a protective aluminium cap which prevents the ingress of dirt and other contaminants into the valve. There is also an attachment point around the neck of the cylinder to assist with securing the cylinder to the mountain when stored.

A full list of the cylinder specifications can be seen in the table below.

Himalayan Summit Oxygen Cylinder

### Himalayan Summit Oxygen Cylinder Specifications

Cylinder Capacity	Working Pressure	Litres of Oxygen	Cylinder Weight	Weight of Oxygen	Weight of Valve	Total Weight	Length (mm)	Diameter (mm)
4-ltr	300bar	1200	2100g	1600g	110g	3910g	567	110

## Himalayan Facemask



Himalayan Facemask with 100ml oxygen reservoir, 'snood' protecting exhalation valve and protective cover for inhalation valve.



Himalayan Facemask with 200ml 'snood' protecting exhalation valve, protective cover for inhalation valve and head harness with neck strap.



Flow Indicator

**Introduction** - Summit Oxygens Himalayan Facemask is the culmination of several years of research and development. The result is a facemask that addresses the issues of using supplementary oxygen on the worlds highest mountains.

**Oxygen Reservoir** - The oxygen reservoir is a sleek and compact design conveniently mounted on the side of the facemask. This gives it good protection from accidental damage, and also means the collected volume of oxygen is as close as possible to the mouth ready for the next inhalation.

**Inhalation Valve** - The inhalation valve is covered to prevent strong winds blowing straight onto the valve and deforming it. This also prevents the valve from becoming blocked by hoods and other face protection. The valve flap itself is balanced to open fractionally after the oxygen inlet valve ensuring oxygen is delivered to the lungs before atmospheric air.

**Exhalation Valve** - The exhalation valve is protected by a rubber 'snood' which is firmly attached to the front of the mask allowing climbers to break off any accumulated ice. The 'snood' also gives thermal protection to the exhalation valve preventing ice forming on the valve flap itself and instead forming on the 'snood' which can then be broken off.

**Flow Indicator** - Oxygen flow is confirmed by the 'flow indicator' which gives a visual indication that oxygen is flowing correctly. It is manufactured in a hardened clear case and is very easy to read.

**Head Harness** - The head harness is manufactured from webbing with elastic straps and buckles for tensioning. There is also an elastic neck strap to keep the bottom of the facemask securely in place.

**Mask Size** - The Himalayan Facemask is available in two sizes, indicated by the colour of the oxygen delivery hose.

Small - Blue hose

Medium - Red hose

Large - Black hose

**Reservoir Volume** - The Himalayan Facemask is available with two different oxygen reservoir volumes.

100ml for flow rates unto 4-lpm

200ml for flow rates unto 6-lpm

## Himalayan Regulator



Summit Oxygens Himalayan Regulator is the lightest oxygen regulator available weighing just 240g. It is also extremely accurate, an important feature when calculating the endurance of a cylinder. Each flow is selected using the positive click stop knob on the top with the window clearly showing the flow rate selected. There are two versions of the regulator available with the following flow settings.

4-lpm - 0, 0.5, 1.0, 1.5, 2.0, 2.5, 3.0 & 4.0

6-lpm - 0, 0.5, 1.0, 2.0, 3.0, 4.0, 5.0 & 6.0

Himalayan Regulator (Standard)