



Ryan Swaine &lt;viamed.ryan.swaine@gmail.com&gt;

---

**RE: information request**

1 message

**ROBACH Paul** <paul.robach@ensm.sports.gouv.fr>

26 April 2024 at 16:09

To: "ryan.swaine@vandagraph.co.uk" &lt;ryan.swaine@vandagraph.co.uk&gt;

Hi Ryan,

Thanks for your swift reply.

Regarding the two issues :

1. We will have the opportunity to bring 100% O2 (and also 16% O2) to altitude
2. Good to know that your device is being used in military aircrafts and on Everest expeditions. I have the same gut feeling as you, ie, that the device and sensor will not be damaged and will be functional at 620 hPa.

I am nonetheless aware that I will be working below the nominal lower limit for pressure.

In sumary, I am interested in this device. Could you please send me a quote including all taxes and shipping costs ? As a state-owned school, we must follow the following procedure : 1) to send you an order, based on your quote ; 2) to get the product delivered in Chamonix ; 3) to pay you via bank transfer once we have received your invoice (along with your bank details). Is such procedure acceptable for you ?

Kind regards,

Paul

---

**De :** Ryan Swaine <viamedinbox@gmail.com>**Envoyé :** vendredi 26 avril 2024 13:57**À :** ROBACH Paul <paul.robach@ensm.sports.gouv.fr>**Objet :** Re: information request

Hi Paul

In lowering the pressure there are two potential issues:

- 1) The sensor/monitor reads partial pressure or oxygen, although it displays %. If you want an accurate O2 percentage, you will need to calibrate the device at the same pressure as you are taking the reading.

2) In lowering the pressure beyond the specified limits, there is a risk of damage to the sensor and monitor. The Mysign O is being used in military aeroplanes, so I imagine, but can't say for certain that the monitor would survive the pressure drop you mentioned. We did not have the testing conducted, it was done by one of our clients.

The OOM111 sensor that is used on the Mysign does not have a specified pressure limit, but looking at very similar sensors coming off the same production line, they have a lower limit of 0.6 bar, so I believe they would survive okay, but I can not state that for definite.

Some of these sensors have been used on research expeditions on Everest, so my gut feeling is that they will work okay.

Best regards

Ryan

Ryan Swaine

General Manager  
VANDAGRAPH Ltd.

<http://www.vandagraph.co.uk>  
Email [ryan.swaine@vandagraph.co.uk](mailto:ryan.swaine@vandagraph.co.uk)  
Tel: +44 (0)1535 634900  
Mob: +44 (0)7803 907117

On Thu, 25 Apr 2024 at 17:49, ROBACH Paul <[paul.robach@ensm.sports.gouv.fr](mailto:paul.robach@ensm.sports.gouv.fr)> wrote:

Dear Ryan,

Thank you for your prompt answer, and sorry for my late reply.

The MySign O monitor may well suit our requirements for use in hyperoxic atmosphere.

My only concern is about the lower limit of ambient pressure (750 hPa), since the device will be used in hypobaric hypoxia, at an altitude of approx. 3800m, corresponding to 620-640 hPa.

I would like to know if the device still « works » at 620-640 hPa (perhaps with a lower accuracy – we can test this with room air and 100% O2), or just doesn't work.

Thank you for your help on this matter.

If this issue can be overcome, could you please send me a quote, including all taxes and shipping cost to the following address :

Ecole nationale de ski et d'alpinisme

Paul Robach

[35 route du Bouchet](#)

[74400 Chamonix](#)

[France](#)

Thank you

Best regards,

Paul Robach

---

**De :** Ryan Swaine <[viamedinbox@gmail.com](mailto:viamedinbox@gmail.com)>

**Envoyé :** mardi 2 avril 2024 16:48

**À :** ROBACH Paul <[paul.robach@ensm.sports.gouv.fr](mailto:paul.robach@ensm.sports.gouv.fr)>

**Objet :** Re: information request

Dear Paul

Thank you very much for your email.

I am pleased to inform you that I believe we have a device that will suit your requirements. Please find attached a leaflet for the Mysign O monitor which has adjustable high and low alarms for constant monitoring.

Please note that we supply analysers to clients replicating low altitude with low O2 %. The Mysign O would not be suitable for this, as it has preset hypoxic alarms.

Mysign O Kit (includes sensor, rechargeable battery and mains power supply) = GBP £395 each EXW.

I look forward to hearing from you and please do not hesitate to contact me with any questions you may have.

Kind regards

Ryan

Ryan Swaine

General Manager  
VANDAGRAPH Ltd.

<http://www.vandagraph.co.uk>

Email [ryan.swaine@vandagraph.co.uk](mailto:ryan.swaine@vandagraph.co.uk)

Tel: +44 (0)1535 634900

Mob: +44 (0)7803 907117

On Tue, 2 Apr 2024 at 14:33, ROBACH Paul <[paul.robach@ensm.sports.gouv.fr](mailto:paul.robach@ensm.sports.gouv.fr)> wrote:

Dear Vandagraph team,

I contact you on the behalf of [bubble-diving.com](http://bubble-diving.com).

I am looking for an oxygen sensor monitoring inspired O2 fraction in ambient air. The aim is to monitor FIO2 overnight in a hyperoxic room filled with around 30% O2.

This request is for research purpose, in relation with nocturnal oxygen enrichment at high altitude.

We would like to get a device able to record FIO2 during the whole night, and if possible, with an adjustable FIO2 alarm.

Do you sell this kind of product ? In this case, I would be interested in receiving a quotation.

If not, could you recommend me a company selling such analyzer ?

Thank you.

Best regards,



**Paul ROBACH, PhD**

Responsable de la recherche biomédicale  
et formateur département Alpinisme  
paul.robach@ensm.sports.gouv.fr

Ecole Nationale de Ski et d'Alpinisme  
35 route du Bouchet  
74400 Chamonix-Mont-Blanc

ensa.sports.gouv.fr

**Tél.** +33 4 50 55 30 28

**Port.** +33 6 67 05 39 19

