

The CCR **RED**efined™

The most advanced CCR just got better...

- Advanced modular design for hassle free travel
- Gaseous CO₂ monitor
- 100m ready to dive out of the box
- Industry leading PO₂ stability control
- Flood resistant design
- The only CE rated four hour CO₂ filter duration

At VMS, we believe that safe, bubble free rebreather diving is the future. Whatever inspires you to explore our underwater world, your diving will benefit greatly from the high performance of meticulously designed, impeccably engineered and rigorously CE tested RedBare CCR.

We know that early warning of problems is the key to safety. Not only have we designed the RedBare to be more reliable and fault tolerant than any other unit, we have designed it to give you simple, but comprehensive information about your CCR, helping you make better, safer decisions.



Cutting edge

explorers endorse the RedBare CCR for it's design and performance - for these divers, simplicity helps them focus on exploration. For all other divers, the RedBare CCR offers greater confidence, reliability and enjoyment, wherever your diving adventures take you.

Introducing the VMS RedBare CCR...

The VMS RedBare CCR evolved from the popular RedHead CCR. Building upon the CE tested and field proven performance of PO₂ tracking and CO₂ monitoring, we have upgraded the configuration to offer considerable enhancements to both travel and work of breathing.

A travel-ready RedBare CCR weighs just 18.4 kg, with loop and electronics safely stowed in your hand luggage. The new counterlung position maintains a clean front, but now offers exceptional breathing performance with an assisted start to both inhale and exhale.

Sleek CCR shield and cylinder mounting now noticeably reduces in water drag.



ONLY
£7950
inc VAT

Unit complete and
ready to dive!



Life Support: Early warning before the Incident Pit

All rebreather divers agree that they need enough breathable gas, a working scrubber and a battery that will last the dive. Each dive is spent monitoring these resources by contents gauge, O₂ cells and maybe checking for headaches to detect CO₂ (the ability of the human body to detect CO₂ before problem levels is not reliable).

The RedBare CCR takes the legwork out of these checks. The RedBare CCR directly monitors PO₂, CO₂, HP on diluent and O₂, plus sofnalime temperature and battery levels. That's what all rebreather divers need, but many have to do manually. When levels are normal, the system displays a green light on the HUD. Problems display as either a 'manageable error' flashing blue green, or a 'bailout' flashing red, backed up by a patented buzzer. Further information to prompt fault finding and problem resolution is found on the handset. It's a very simple system that works.

The RedBare CCR is also able to relate remaining CO₂ 'scrubbing' time to divers metabolic activity, giving accuracy of scrubber use that is not available on any other CCR. The harder you work, the more CO₂ you will produce and the shorter your sofnalime will last. The RedBare CCR takes the guesswork out of this for you.



Removeable, rechargeable, redundant

PO₂ Tracking

Know your PO₂ is the golden rule of technical diving! The flipside of this is keeping that PO₂ steady throughout the dive - fluctuations and wobbles don't help.

PO₂ is monitored by the RedBare CCR via three cells, with custom sampling rates to deliver fine control and adjustment. Breathe a bit quicker, descend or ascend - the RedBare CCR will have your PO₂ nailed back in place with varying injection rates to suit ascending, descending or stops. The most precise adjustment is only 50ms long - just right for PO₂ control at 100m.

Modularity & Strength

The RedBare CCR features robust plug and play cable connectors to enable rapid component swapping for diagnosis and trouble shooting.

Damage to individual components in remote locations is no longer trip or dive ending when combined the with 'Platinum triage kit' concept for team diving. The kit includes spare handsets and other critical modules to be taken to remote locations ready for instant use with minimum tools.



Primary & independent secondary computers

Performance & Stats

Work of Breathing (WOB)	0.48 Joules per litre at 100m on 10/80 trimix
PO ₂ Tracking	+/- 0.02 Bar at 100m
Scrubber Endurance	4 hours - longest CE test duration on the market
Travel Ready Weight	18.4kg with loop and electronics removed

Discover the **VMS RedBare CCR**



Failure Modes & Redundancy

All technical diving requires a backup system and the RedBare CCR offers a backup process for virtually any scenario.

It includes manual bypasses, component control and a completely Independent Secondary that uses a 100% separate information route to track PO₂ and decompression obligations live. That's a second trimix CCR computer working for you, included as standard!

Electronics 'Vault'

At the heart of the RedBare CCR lies the electronics vault. Machined to fine tolerances from Delrin, the electronic brain is formed from plug and play boards with moisture repellent coating, encased in a robust pod.

All connections to this pod are internally potted to limit water ingress and it is removable for electronics protection during travel. The weakness of any rebreather system is the depth sensor – this is now potted into its own mount to reduce possible water ingress and the pod is removable.

Travelling Light

The RedBare CCR is perfect for the travelling CCR diver. If your bucket list takes you to remote corners of the globe on low-cost airlines, the RedBare CCR can be easily configured for hassle free travel at just 18.4 kg, plus a 4kg box keeps it all under a bag limit of 23kg. The use of a standard backplate design also allows further weight reduction with an alloy plate.



About VMS

Sales & Service

When you purchase a VMS RedBare CCR, Expert advice is just a phone call or email away during normal hours.

RedBare CCR units are available for sale from a network of instructors who have been fully factory orientated on the benefits of the RedBare CCR – for an up to date list, just check www.vmsrebreathers.com

VMS is dedicated to RedBare CCR support and development. Based at Vobster Quay, it has its own fully equipped mechanical and electronic workshops, plus diver support from experienced RedBare CCR rebreather divers. VMS has been awarded the industry recognised ISO9001 for its CCR manufacture and support procedures. In addition, VMS has achieved the landmark CE certification from SGS for the RedBare CCR – the most demanding technical assessment for any diving apparatus.

Discover the **VMS RedBare CCR**



Upgrade your legacy Sentinel CCR

The Red Series upgrades offer a rapid and easy to install upgrade path for owners of legacy Sentinel units. They deliver all the features and benefits of the innovative RedHead and RedBare CCRs in an affordable package.



Red Series benefits...

- Modular 'Plug and Play' construction for all components, cables and handsets.
- Top mounted, rechargeable PO₂ module
- Top mounted CO₂ module
- Weight savings for hassle-free travel
- Repositioned wired HP senders
- Independent secondary handset computer monitors loop and provides backup decompression information

VMS Red Series pricing...

Red Series CCRs offer an unrivalled fusion of market-leading specification, cutting-edge performance and value for money. For upgrade information, please contact VMS for an exact price based on your specific unit spec. All prices include UK VAT charged at 20%.



New CCR units	RedHead	RedBare
New Red Series CCR - complete and ready to dive	£ 7950.00	£ 7950.00
Unit Upgrades		
Legacy Sentinel - Wired	£ 3339.00	£ 4314.00
Legacy Sentinel - Opticon	£ 2950.00	£ 3935.00
VMS Sentinel RedHead	-	£ 995.00

PLEASE NOTE: RedHead and RedBare upgrades are an exchange - VMS will retain your existing head and handsets. Changes to hose lengths at additional cost. Service costs do not cover consumables such as cells and batteries. It also does not include non service items found to be faulty during service process.