

# BIOPAK 240 REVOLUTION®



**Built to Bring You Home**

**BIOMARINE**  
REBREATHERS

[www.biopak240R.com](http://www.biopak240R.com)

Worldwide  
Safety Approvals



# BIOPAK 240 REVOLUTION®



## Easier Breathing

High volume, low resistance breathing means more comfort and less stress:

- Lowest closed-circuit breathing resistance available at all work rates
- Minimal 6 liters of tidal volume
- Large breathing chamber uses three springs for guaranteed positive pressure
- Vents only used air, reducing O<sub>2</sub> and demand valve usage

## Faster Deployment

Revolutionary, Solid CO<sub>2</sub> scrubber design enables a super-fast deployment:

- New, Quick-Changing Cooling System lets personnel return to the job faster
- Cuts return to service time by up to 50%
- Change out cooling while unit is being worn, without breaking into the breathing loop or removing the external housing
- Eliminates manual measuring and refilling of granular CO<sub>2</sub> absorbent
- Eliminates direct user contact with corrosive CO<sub>2</sub> absorbent

## Greater Safety & Comfort

Designed to keep personnel safer, more comfortable, and fully aware of operational status:

- Optical warnings for low battery, coolant installation status, and 25% end of service
- Auditory warning for low oxygen supply
- Radio interference shielding
- Lighter weight, more comfortable to wear
- Flame-rated harness
- Optional hydration system

**Better performance. Greater safety. Lighter weight.**

**And it's easier to operate and maintain than any other unit on the market.**



- Large breathing chamber incorporates three springs for guaranteed positive pressure. Vents only used air, reducing overall oxygen need and demand valve usage
- Sensor-monitor reminds user if frozen coolant canisters have not been installed prior to use
- Pneumatic pressure gauge displays O<sub>2</sub> status
- Electronic alarm sounds when oxygen supply reaches 25% end of service
- Fiber optic warning signals: normal operation, low battery, possible ice missing, and 25% end of service
- Manual quick disconnect prevents O<sub>2</sub> loss if gauge line is damaged
- Exceptionally long battery life
- Low maintenance cost



## **Worldwide Safety Approvals**

The Biomarine BioPak 240 Revolution is approved by:  
NIOSH • MSHA • EN-145/136 • MA • DGMS • GOST

The BioPak Revolution 240 Rebreather was developed to protect the men and women who put their lives on the line in dangerous and demanding conditions. Whether it's a mine or tunnel rescue, an industrial accident, a HazMat clean up, search and rescue, or an incident involving military or homeland security, Biomarine helps those who serve and protect to do a better, safer job.

## Answering the call with cutting-edge technology.

### Quick-change Cooling System

The BioPak 240 Revolution's long lasting, refillable cooling canisters can be changed in seconds, while the operator is wearing the unit. Positive pressure is maintained and there is no need to open the housing or break the breathing loop. Simply twist off the external lids, swap out frozen canisters, and replace the lids.



### Faster, Easier CO<sub>2</sub> Scrubber Refresh

BioPak 240 Revolution's unique Solid Core Scrubbers<sup>®</sup> feature CO<sub>2</sub> absorbent packaged in disposable cartridges. They are easier to replace than granular absorbent, which requires precise measuring, refilling, and resealing of a canister. The 240 Revolution's Solid Core Scrubber<sup>®</sup> absorbent cartridges make for faster deployment. They will not channel, dust, or settle during transportation, they eliminate the potential for refilling errors, they contain integral sealing, and they isolate the technician or end user from direct contact with corrosive chemicals. Water retention pad absorbs all generated free water.



Old-style granular CO<sub>2</sub> absorbent



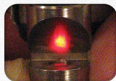
New disposable, Solid Core Scrubber<sup>®</sup>



### Continual User Feedback

The BioPak 240 Revolution keeps the user completely aware of unit status and oxygen supply via visual and audible alarms:

- O<sub>2</sub> supply status is monitored by pressure gauge with visual and audible alarms at 25% remaining capacity
- Visual and audible alarms provided for low battery and system faults
- Visual coolant installation reminder provided
- Independent and redundant pneumatic and electronic feedback systems rated for intrinsic safety
- Robust, error-free design



■ Alarm condition



■ Status OK



■ Insert coolant canister reminder

## Peak Performance Hydration System

The AV 3500 face-mask drink system fights dehydration before it starts:

- Direct connection to the AV3500 mask hydrates on the move, when it's needed most.
- 1.5-Liter (50 oz) reservoir
- Low profile fits under protective gear
- Wide fill-port for easy filling and cleaning
- Rugged, durable materials are rupture resistant
- Simple to operate
- Field tested reliability



## Designed for Safety

The BioPak 240 Revolution gives the user every safety advantage:

- Stainless steel fiber-reinforced housing provides for a mechanical and electronically robust design
- Hardened breathing chamber
- Manual quick disconnect prevents O2 loss if the gauge line is damaged
- Electronic alarm sounds when the supply reaches 25% of service life
- Flame-rated harness
- Solid Core Scrubber® CO<sub>2</sub> absorbent

## State-of-the-art Face Mask

The BioPak 240 Revolution features the AV3500 advanced facepiece:

- Voicemitter for increased communication clarity
- 5-point quad adjustment harness for better fit
- Magnetic facepiece lens wiper promotes internal and external surface wiping with a single pass. No facepiece pass-throughs required to operate the wiper
- Optional hydration system drink port
- Life-time laminate film eliminates fogging



## Enhanced User Ergonomics

With a body-contoured design, the BioPak 240 Revolution is comfortable to wear and simple to use, with all controls and displays easily accessible:

- Slim profile can be comfortably worn under protective gear without restricting movement
- Fully padded ergonomic harness positions the unit on the hips or the shoulders, reducing operator fatigue
- Harness can be easily adjusted to fit any size user
- Moisture generated within the system during use is retained and prevented from reaching the facepiece



# Easier to operate. Less expensive to own.

The BioPak 240 Revolution is designed to deliver lower cost, extended reliability, and reduced maintenance. The 240 Revolution has a lower initial purchase price, costs less to maintain, and provides a lower total ownership cost than any other closed circuit, positive pressure, four-hour rebreather. No mandatory replacement parts or factory rebuilds are required for the life of the unit.

To withstand the most rugged use, the 240 Revolution's housing features stainless steel fiber-reinforced polymer construction.

## Lower Costs

- Lower initial purchase price
- Lower maintenance costs
- Lower total cost of ownership
- No mandatory replacement parts or factory rebuilds

## Easier to Service

- Easy-to-operate latches
- Easy-to-remove breathing chamber
- Threaded positive cylinder connection
- 50% reduction in turn around time

## Tougher, Robust Construction

- Stainless steel fiber-reinforced polymer construction
- Reduced tubing and connections
- All electronics are internal
- Flame-tested components
- Material selected for electromagnetic immunity
- Designed and manufactured in the USA

## Specifications

### Weight Dimensions

33 lbs. 23.0"Lx17.3"Wx7.0"D  
(15 kg) (584mmx439mmx178mm)

### O2 Cylinder

3000psig (440L @ 207 Bar)  
Oxygen

### Duration

4 hours (240 mins)  
Certified

### Packaging

Molded carrying case  
or soft case

The simplified internal plumbing design reduces pneumatic tubing and connections, dramatically improving reliability and reducing overall weight. A positive connection between oxygen cylinder and regulator assures correct alignment and a secure connection. All hoses, housing, facepiece, and external components are made of flame rated materials.

The BioPak 240 Revolution features fewer parts for quick servicing. Service access is simplified with an easy-to-operate latch system and easy to remove breathing chamber.

