the new generation

diving lamps with lithium-manganese-accumulators

FUN-Light LiMn **+ extreme** LiMn

The two most successful diver's lamps of mb sub are now also available with new high energy accumulators. We decided in favour of the new lithium manganese accumulators, because this is a confident version of the lithium ionic accumulators. This means that these accumulators are not in need of a protective circuit compared to other lithium ionic accumulators, because extreme chemical reactions in the cell are impossible.

extreme LiMn *FUN-Light LiMn*

The great advantages of lithium manganese accumulators are up to the nearly not existing self discharge and the high capacity yet at coldness. The cells are rechargeable at any time regardless of the charge state. There is no memory effect at all any more. Alone therefore, these are the perfect energy source for diver's lamps.

In both lamps the same accumulator is attached but with different packing. In respect of the power, both lamps are identical. The main difference is up to the integrated electronic charge of the extreme LiMn. Here, merely an external mains adapter with 24V and 2A is used. Both lamps are equipped with a multi-stage capacity indicator.

For charging, the extreme LiMn must not be opened as the first lamp at mb sub. With the extreme LiMn exist for the first time a high quality dive lamp with closed charging. This is also an advantage of the new lithium manganese accumulator. Who wants to open the lamp for charging, may do this as always without use of tools.

The **FUN Light LiMn** is a little more low-priced due to use of an external charger. Cold light reflector lamps are used here as light source, which allow a huge variety of performance and light characteristic combinations. IRC halogen burners can be used for a still bigger light efficiency.

The **extreme LiMn** uses halogen burners with separate, replaceable aluminium reflectors as light source. These are available with an angle of reflected beam with 12° Spot, 80° (with hotspot) and 90° Flood as photo / video light. The energy supply to the halogen burner is affected by a voltage-dependent working electronic this way that the extreme LiMn burns with constant intensity during nearly the whole burning time, what makes much sense with a use as photo / video lamp.

Both lamps have in common that maintenance of the accumulator is limited to a minium. During a longer non-usage it is completely sufficient, if the electric charge condition is checked by short engaging and control of the capacity indicator every few months.

FUN-Light LiMn

LiMn accu 16,8V 4,8Ah 4S3P
multi mirror lamp 12V 20W,35W,50W
IRC bulb possible
socket GU 5,3
3 step dimming
SOS signal
4-staged capacity indicator
discharge protection.
burning time table with max. power
with 30W power approx. 140 min
with 48W power approx. 85 min
with 70W power approx. 55 min
quick charger 110 230V
charging time for 85 capacity = 2 Std
charging time for 100 capacity= 4 Std
weight: 1,5kg; drift: 0,4kg
dimension: L=233 mm; ø=66 mm

extreme LiMn

LiMn accu 16,8V 4,8Ah 4S3P
halogen bulb 12V 20W,35W,50W
IRC bulb is possible
socket GY 6,35
3 step dimming
SOS signal
4-staged capacity indicator
integrated charging electronic
discharge protection
external rechargeable
burning time table with max. power
with 30W power approx. 140 min
with 48W power approx. 85 min
with 70W power approx. 55 min
charging time for 85 capacity = 2 Std
charging time for 100 capacity= 4 Std
weight: 1,55kg; drift: 0,45kg
dimension: L=185 mm; ø=79 mm

mb sub ingenieurgesellschaft für unterwassertechnik mbH
Robert-Perthel-Str.29 D-50739 Köln Tel: 0221-9762140
www.mb-sub.com mbsub@mb-sub.com