

DOLPHIN mk2

Compact Light – Backup

The diving light Dolphin Mk2 is the evolution of the most compact model of ARTEK. It has been designed to offer a higher power (550 lumen) and more light penetration during immersion.

Impress its size-power ratio. It allows squeezing out all the battery runtime without worrying on sudden shutdown.



DESIGN PROCESS

It is our best-selling product and we've decided to go a little further. There's an aesthetic redesign, changing its appearance slightly due to pigment-free hard anodizing and a more minimalist line.

We have used a different LED than the previous versions of Dolphin. There's an improvement in the concentration of the main beam (spot), achieving a much more penetrating light.

LIGHT POWER AND RUNTIME

This model has a light power of 550 lumens in a very small size. It maintains the light output up to 70% for 2 hours and 20 minutes. After 4 hours of use there is still a power of 15%.

In 2012 we presented our flashlight with 400 lumens. Then we reached the level of 460 lumens. Currently there are 550 lumens.

SIZE - PERFORMANCE RATIO

Being able to deliver 550 lumens for more than 2 hours makes necessary to use a lithium battery with high capacity. Thanks to its reflector, we get a concentrated beam and a useful peripheral light.

This flashlight can be used on the surface without any risk, as the heat generated does not pose any danger.

OPTICAL SYSTEM

The combination of a specially selected quality LED and the aluminium reflector designed by ARTEK® makes possible to have a beam of more than 20.000 lux at one meter.

QUALITY

All components of this unit, from the battery to the LED itself, are extremely well cared for. The material used for the flashlight body is machined aeronautical grade aluminium anodized according to military specifications. The LED is manufactured by CREE®, but it is also carefully selected to have the performance we demand.

The reflector is designed to provide a concentrated beam with high efficiency. The batteries are lithium batteries, with high capacity and no memory effect.

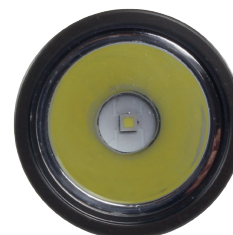
MADE IN SPAIN

Like all our flashlight, it is designed and manufactured in Spain, from the SMD welding process into the PCB, to the machining and anodizing of the aluminium body.

In addition, unit has its own unique serial number that identifies it.



Dolphin mk2
Side view



Front view. Detail
The LED from CREE® ensures a high efficiency with a very high quality light.

ALUMINUM UNIBODY

Aeronautic grade aluminum AL6082 Hard Anodized according to Mil-STD8625.
High durability and resistance.
One-piece machined body.

HEAT-COOLING

Fins are designed to dissipate heat generated by LED, allowing to assure long-life for all components.

REFLECTOR

Designed by ARTEK® to specifically work with the LED. Reaches high optical efficiency generating a concentrated light beam to improve light penetration.

LED



The main flashlight component. Provided by CREE, the most prestigious worldwide and market leading LED manufacturer.
Lifetime > 70.000 hours.
550 lumens. CRI above 70 and 6500 °K

CAP

Machined on aluminum as the body. Allows extraction of the battery for charging it. Double O-Ring NBR70 to ensure perfect sealing.

HOLE

Features a machined hole to attach a cord and avoid missing the flashlight. Not recommended the use of metallic rings due to avoid corrosion problems.

Lithium battery

Uses single 18650 Li-ion rechargeable battery. No memory effect. With all security protections to ensure long-life.

ELECTRONICS

The driver manage the current delivered to LED. Great efficiency to exploit all battery energy without any risk.



Lithium battery
No memory effect.
Low autodischarge.
Ref. ARBT02



Single Charger
It charges only one Lithium battery.
Ref. ARCH02



Dual Charger
It charges two batteries independently.
Ref. ARCH01



Carrying bag
Its perfect for carrying and storing the flashlight and its battery and charger.
Ref. ARPK001



Set Dolphin

Included: flashlight, battery, single charger and the carrying bag. Ref. ARDP01S

ALL INCLUDED

Set Dolphin (Ref. ARDP01S) includes all the components needed to use the flashlight since the first minute, no external accessories needed.

- Dolphin Flashlight
- Single charger
- Battery
- Spare O-rings
- Carrying bag

LED AND OPTICAL SYSTEM

LED choice is one of the most critical design points on the flashlight. We select the specific LED focusing not only on electrical efficiency but also considering light-emission pattern, color temperature and chromatic reproduction index. All these parameters combined determine the final quality of whole product.

Reflector oversees directing all light emitted by LED. It's critical to feature a good optical system to ensure the total light output. Power without control is useless.

ARTEK® has always defined clearly all the characteristics of our products. It's as important a good light flux (lumens) as the light intensity delivered on the surface (lux at 1 meter). Redesigning Dolphin we have done an improvement to reach 550 lumens and the great value of 20.500 lux at 1 meter.

Once light value is reached we need to provide good quality of it. We use a 6500K color temperature LED and 70 CRI which warrants the more fidelity of colors lightened by this flashlight.

LITHIUM BATTERY

The battery proposed for Dolphin is a 18650 Li-ion cell with a capacity of 3400mAh. Due to this we can provide more than 70% of light max output for 2 hours and 20 minutes. Li-ion batteries have the characteristic of avoid memory effect, so it's no necessary to exhaust it before charging it again, in fact, is recommended to charge it every time is used, even if it's not discharged entirely.

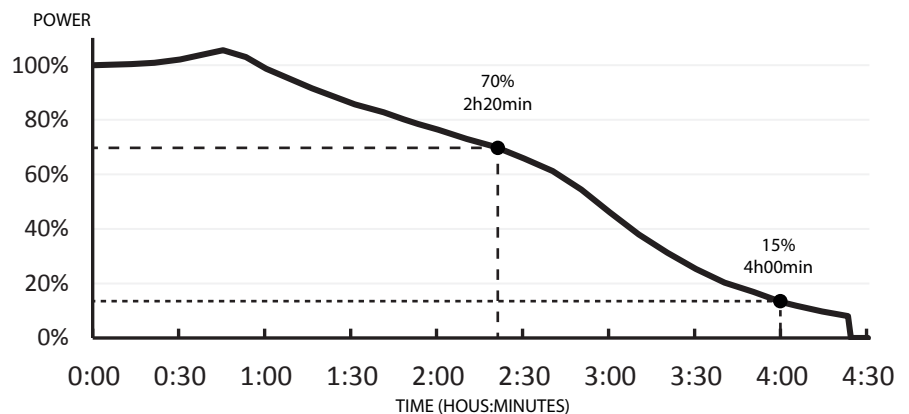
ELECTRONIC DRIVER

Dolphin is very easy to use by turning the cap clockwise until it lights up. We recommend turning on the light before immersion and to turn it off with quarter turn counter-clockwise. Electronic driver oversees regulating the electrical current developed to LED. Dolphin is very used as backup light so the drastic changes on the light output are not desired.

RUNTIME

Discharging type used on this product is a backup type. First part with no output variation. After 2 hours and 20 minutes it remains on 70% power output and it continues decreasing smoothly reaching the 15% light output after 4 hours runtime.

There is no risk on exhausting the battery due to the protections it features to avoid any damage on it.



REFERENCES

Set Dolphin (flashlight, battery, single charger and carrying bag)	Ref. ARDP015
Dolphin	Ref. ARDP01
Battery	Ref. ARBT02
Single charger	Ref. ARCH02
Dual charger	Ref. ARCH01
Carrying bag	Ref. ARPK001

TECHNICAL DATA

DIMENSIONS

Head diameter	45 mm
Body diameter	24,8 mm
Length	132,6 mm
Weight with battery	215 gr

LIGHTING

Luminous flux	550 lúmenes
Illuminance	20.500 luxes @ 1 metro
Emitter	L.E.D. from Cree.
Color rendering index CRI	70 min
Color temperature	6500 K
Beam profile	Spot ±3,7° Spill ±38°

ELECTRICAL FEATURES

Driver	Constant current Polarity, short circuit and overdischarge protections
Switch	Clockwise turning tail cap
Runtime	2 hours 20 minutes (to 70%) 4 hours (to 15%)
Battery	Lithium ion 3,7V 3400 mAh Panasonic cell Protected
Charger	Single Input: 100 - 264 VAC 50/60 Hz Output: 4,2VDC

MATERIALS

Body and cap	Aluminum alloy AL6082. Aeronautic grade Hard anodized. Mil-STD 8625
Lens	Polycarbonate
Reflector	Aluminum

QUALITY

CE	Yes
IP	IP 68 200 meters