TIGERSHARK mk2
Midsize

The diving flashlight Tigershark mk2 is the evolution of the intermediate model of the range products ARTEK®. It has been designed to deliver 850 lumens of light output with higher light penetration during immersion. Perfect compromise between power and size. New features to increase security to this unit.

DESIGN PROCESS
We have designed a product with an ideal form factor. Its small width makes it very easy to use, with powerful lighting without being a massive flashlight . There is an aesthetic redesign, changing its appearance slightly thanks to hard anodizing without pigment and more minimalist and stylized lines. We have used a different LED than previous versions of Tigershark. There is an improvement in the concentration of the main beam (spot), getting a much more penetrating light.

LIGHT POWER AND RUNTIME
This flashlight has a power of 850 lumens in a very small size. The power is constant during the 2 hours and 30 minutes of runtime.
In 2012 we presented our first version of the Tigershark, with 750 lumens.

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 30.000 lux at one meter. The previous version did not exceed 17.000 lux.

C.T.P.
It has a temperature control that offers security. This flashlight can be used on surface use without any risk, since in the event of an increase in temperature, the power is regulated gently, avoiding dangerous temperatures.

BATTERY WARNING AND SAVING MODE
The Tigershark mk2 light has a low battery warning device. With a few flashes, it alerts us that the battery is low. Automatically, after flashes, the power drops to the level of *battery saving mode*. In this way the remaining autonomy increases and we do not run out of light, allowing us to access our backup focus if necessary.

SIZE - PERFORMANCE RATIO
To be able to deliver 850 lumens for 2 hours and 30 minutes makes it necessary to use two high-capacity lithium batteries. Still, we have a very contained size.

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

Tigershark 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.
850 lumens. CRI above 70 and 6500 ºK

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

It uses two 18650 Li-ion rechargeable battery. No memory effect. With all security protections to ensure long-life.

ELECTRONICS

Features a microcontroller to drive a constant light output during whole runtime. Includes an automatic battery saving mode to avoid sudden shutdown when battery is low. After some light blinks we have available more than two hous with 130 lumens.

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

Dual Charger
It charges two batteries independently.
Ref. ARCH01

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

Set Tigershark
Included: flashlight, batteries, dual charger and the carrying bag. Ref. ARTS01S

ALL INCLUDED

Set Tigershark (Ref. ARTS01S) includes all the components needed to use the flashlight since the first minute, no external accessories needed.

- Tigershark flashlight
- Dual charger
- 2 batteries
- 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 Tigershark we have done an improvement to reach 850 lumens and the great value of 30.000 lux at 1 meter. The previous version did not exceed 17.000 lux.

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

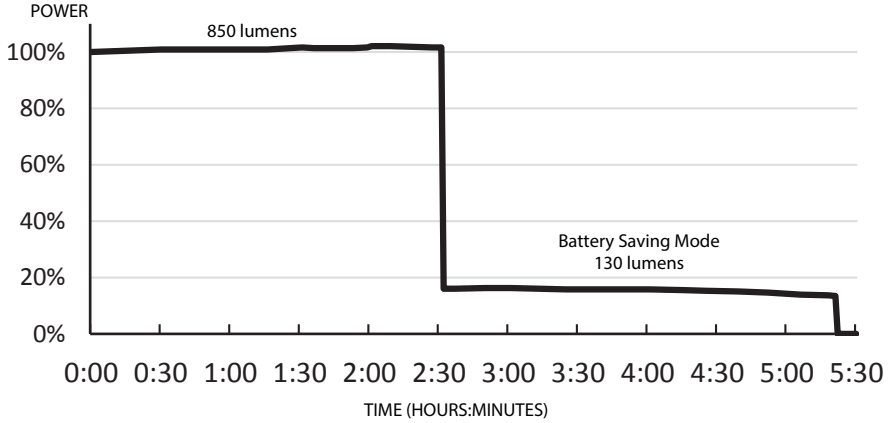
Batteries proposed for Tigershark are two 18650 Li-ion cell with a capacity of 3400mAhty. Due to this we can provide 2 hours and 30 minutes of constant light output (plus extra battery saving mode). Li-ion batteries have the characteristic of avoid memory effect, so it's no necessary to exhaust it before charging it again, in fact, is recommended to charge it every time is used, even if it's not discharged entirely.

ELECTRONIC DRIVER

Tigershark 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. You will have the same light power at the first minute as two hours later.

BATTERY WARNING AND BATTERY SAVING MODE

Thanks to the microcontroller from Microchip that features this model, we have control of the battery state in every moment. Before the battery reach its limit, this flashlight gives us some blinks, to warn us about the low battery state. Automatically tha flashlight goes to battery saving mode, delivering 15% of full power output, offering 130 lumens during two additional hours. This mode allows to finish the activities we desire without sudden light shutdown.



REFERENCES

Set Tigershark (flashligh, two batteries, dual charger and carrying bag)	Ref. ARTS01S
Tigershark	Ref. ARTS01
Battery	Ref. ARBT02
Dual charger	Ref. ARCH01
Carrying bag	Ref. ARPK001

TECHNICAL DATA

DIMENSIONS

Head diameter	45 mm
Body diameter	24,8 mm
Length	201 mm
Weight with battery	302 gr

LIGHTING

Luminous flux	850 lumens (130 in Battery Saving Mode)
Illuminance	30.000 luxes @ 1 metro
Emitter	L.E.D. from Cree.
Color rendering index CRI	70 min
Color temperature	6500 K
Beam profile	Spot ±3,7º Spill ±38º

ELECTRICAL FEATURES

Driver	Constant current Polarity, short circuit and overdischarge protections Progressive temperature control (PTC)
Switch	Clockwise turning tail cap
Runtime	2 hours 30 minutes + battery saving mode Battery Saving Mode: 2 extra hours at 15%
Battery	2 units Lithium ion 3,7V 3400 mAh Panasonic cell. Protected.
Charger	Dual charger Input: 100 - 264 VAC 50/60 Hz 12/24 VDC Output: 2x 4,2VDC

MATERIALS

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

QUALITY

CE	SI
IP	IP 68 200 meters

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