



Commander MK III

The top of the range of the Mariscope line. Power and working capacity combined in a robust and compact vehicle.

After more than 2 years of work and development, the Commander MK III emerged as an ROV equipped with the latest electronics and software, and a symmetrical and hydrodynamic stainless steel structure. Integrating a sonar, an underwater positioning system, a hydraulic manipulator arm and other elements in this equipment capable of descending to 1.000 m is simple.

Like all Mariscope ROVs, the MK II has a strong and robust AISI 316L **stainless steel structural chassis**, hand welded (TIG) and crystal blasted.

This ROV is powered by six powerful **brushless magnetic coupling thrusters** of 600 W each. The **vectorized distribution of its four horizontal thrusters** allows excellent maneuverability in all directions, while its two **vertical thrusters** give it a higher ascent and descent speed.

These state-of-the-art motors, designed by Mariscope, do not use polluting coolants and are protected by an electronic circuit in case of overload.

The fully symmetrical design of this ROV allows the incorporation of **two high resolution (Full HD) video**

cameras, one on the front and one on the rear. Both installed on a tilt system and accompanied by high **power LED lights** integrated in the tilt mechanism or external in robust aluminum housings, whose intensity can be regulated from the surface during the dive. This provides a high quality image on the surface in real time.

Its **standard sensors** (*Depth Gauge, Compass, ROV and Tilt mechanism inclination, Power consumption*) and **automatic functions** (*Auto Depth/Auto Dive/Auto Head, Auto Gimbal*) facilitate the operation of the ROV.

Its consoles (video and wireless control), installed in Pelican cases, make the system highly **transportable and flexible**.

It also has a **self-regulating power supply unit (PSU)** that automatically regulates the voltage loss of the umbilical cable, ensuring delivery of the maximum power needed for the thrusters and increased thruster efficiency.

This ROV also has the **lifetime warranty** that Mariscope offers with its products. It is the only manufacturer in the world to offer this warranty on its systems, with **no limit on working hours**.



■ designed,
■ engineered &
■ made in Germany

BUILT TO LAST



Commander MK III

STRUCTURAL AND OPERATIONAL SPECIFICATIONS

Operating depth	500 / 1.000 meters
Speed	5 knots
Dimensions (Length x Width x Height)	1200 x 800 x 500 mm
Structural chassis	Structural chassis made of AISI 316L stainless steel, hand welded (TIG) and crystal blasted.
Weight	80 - 150 Kg (depending on the equipment)

PROPULSION

Type of thrusters	Brushless electric motors with magnetic coupling. Motors in saltwater resistant aluminum housings with anodized surface and zinc sacrificial anode.
Thrusters power	600 W each in standard version (power can be increased on request up to 900 W).
Number of thrusters	2 horizontal thrusters in vectorized arrangement 2 vertical thrusters

IMAGE AND LIGHTING

Front and rear cameras	Standard Full HD (1920 x 1080) cameras with integrated laser pointers in salt water resistant aluminum housing with anodized surface installed on external tilt system (160° swivel angle). Additional zoom camera options.
Type of lighting	High-intensity submersible LEDs (> 2,900 lumens each) in saltwater-resistant aluminum housings with anodized surface.
Standard lighting configuration	4 total LED spotlights each side: <ul style="list-style-type: none">• 2 LED spotlights attached to the same camera tilt system that rotate simultaneously with it to ensure correct illumination in any camera position.• 2 fixed LED spotlights installed to optimize illumination. This configuration can be easily customized by the user, as the LED spotlights are attached to the chassis by specially designed fasteners to fit the ROV frame.

STANDARD SENSORS AND AUTOMATIC FUNCTIONS

Standard sensors	<ul style="list-style-type: none">- Depth gauge- Digital compass- ROV and Tilt mechanism inclination sensor- ROV power consumption
Automatic functions	<ul style="list-style-type: none">- Auto Depth / Auto Dive- Auto Head- Automatic Gimbal (automatic tilt correction to maintain the observed horizon)



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SURFACE UNITS

Video Console

Installed in waterproof Pelican case.
21.5" monitor, industrial computer with forced cooling and SSD recording drive with 500 Gb capacity.
Real-time Full HD transmission to surface via high-speed Ethernet.
On-screen display of piloting functions and sensor information.



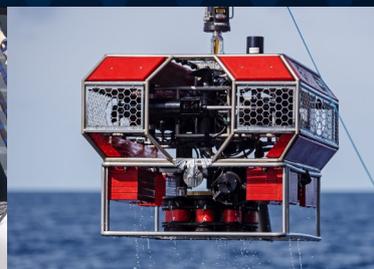
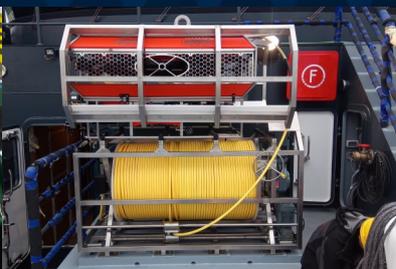
Steering Console

Installed in Pelicase Hull iM2050 case with carrying strap.
Wireless, with range up to 500 meters and rechargeable LiPo batteries.
2 joysticks for ROV operation.
Control of lights on/power (by potentiometer) and all available piloting functions.



PSU (Power Supply Unit)

The PSU automatically regulates the voltage to compensate for the voltage drop along the umbilical cable, thus ensuring delivery of the maximum power needed for the motors and higher motor efficiency.
The PSU is installed in a waterproof Pelican case with wheels.



CABLE AND REEL/WINCH

Umbilical cable

Multipolar with polyethylene or polyurethane coating, high visibility yellow color and neutral buoyancy.
With Kevlar reinforcement and 2 ton tensile strength.



Reel / Winch

Stainless steel AISI 316L made, with 18-way gold plated slip rings in sealed version, in an additionally sealed container box.
For cable lengths up to 500 meters, it is supplied with manual reel.
For lengths of 500-1000 meters it is supplied with electric winch with the same characteristics.





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POWER REQUIREMENTS

Electrical power required 5-8 Kw

Type of power required Input selectable between single-phase 230 V AC or three-phase 380 V AC.

DURATION OF THE WARRANTY

Time Lifetime

Working hours No limits



OPTIONAL ACCESSORIES

Special sensors for measuring CO₂, H₂S, CTDO, oil in water, UTM/CP probes, and others on request

Special cameras and EOD lighting on request, special recording systems.

Forward-looking or high definition/multibeam sonars on request

Different types of USBL tracking systems are available upon request

Multifunction electric or hydraulic manipulators on request adapted to customer's requirements

Cavitation cleaning units, sediment samplers and other work accessories



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