



# THE GORILLA ROV



**COPENHAGEN  
SUBSEA**

## RELIABILITY IS THE HIGHEST PRIORITY

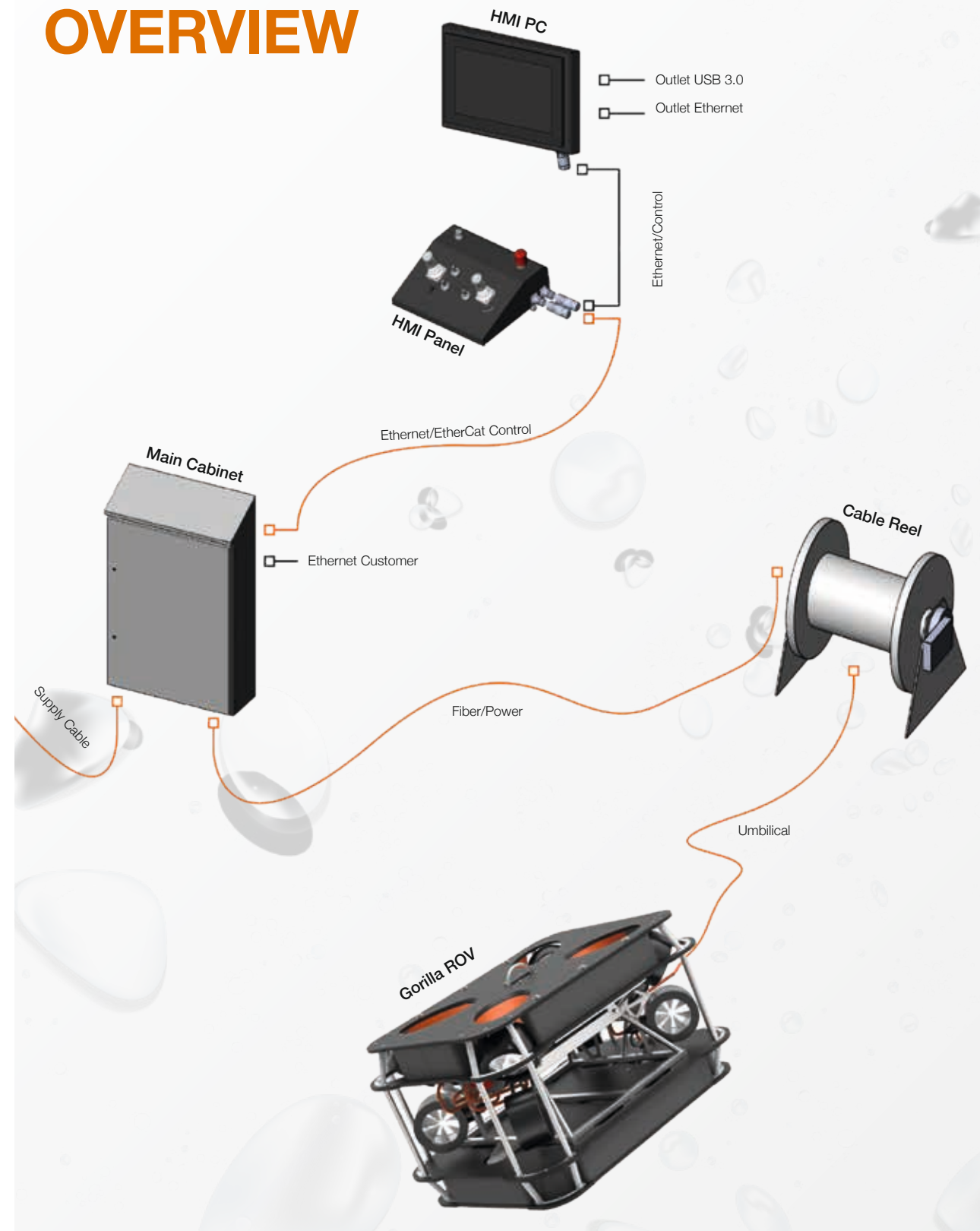
The Gorilla ROV from Copenhagen Subsea A/S is based on our reliable rim-driven thruster technology which, combined with industrial electronics from the leading Japanese company OMRON, gives an unprecedented level of reliability.

The use of 8 powerful thrusters gives the Gorilla ROV the ability to keep its position in strong currents. Its exceptional robustness enables operation in harsh and demanding environments.

The electrical system of the Gorilla ROV is based on industrial hardware from OMRON. The use of an open platform with reliable OMRON components means the user can easily maintain the electrical system themselves, purchasing spare parts locally when necessary with minimal waiting time.



# SYSTEM OVERVIEW



# TECHNICAL SPECIFICATIONS

Depth Rating	600 Meter Water Depth
Length	1425 mm
Height	800 mm
Width	1025 mm
Weight in Air	350 kg
Payload kg	70 kg
Max Forward Thrust	128 kg @ 10 kW
Max Lateral Thrust	128 kg @ 10 kW
Vertical Thrust	118 kg @ 10 kW
Speed	To be verified in tests
Horizontal Thrusters	4
Vertical Thrusters	4
Auto-Depth	Yes
Auto-Heading	Yes
Auto-Altitude	Yes
Auto Pitch/Roll	Yes
Station Keeping	Yes
Payload	<ul style="list-style-type: none"> <li>• Fibre cable available for payload data transfer</li> <li>• 600 VDC available for payload voltage supply</li> <li>• 10 kW total power available to be shared between propulsion and payload</li> </ul>
Supply Voltage	3 phase 400 VAC 50/60 Hz
Max Current for Station Keeping	To be verified in tests

# FEATURES

- Open system architecture fully maintainable by customer
- Lock and latch system for high altitude launch and recovery
- Remote access via VPN connection for support and monitoring
- All vehicle data saved for debugging
- Temperature monitoring
- Online display of motor isolation value
- Leak sensor
- Fiber optic data transfer in umbilical for fast and noise immune transfer of data
- UPS - Uninterrupted Power Supply for safe power down of electronic



# OMRON INDUSTRIAL HARDWARE INSIDE

The electrical hardware on the Gorilla ROV is based on OMRON components. Thousands of these are deployed worldwide and they are built to handle extreme conditions, such as high current inrush from the thruster

during deceleration and current overload at fast shifting of the thruster direction. Both of these are critical for the ROV to be able to keep its position in strong currents.



In order to control the thrusters, the Gorilla ROV utilizes the MX2 frequency inverter to ensure reliable and powerful manoeuvring.



The interface between the electric components is based on the EtherCAT communication system. This technology is used in factories worldwide and ensures reliable communication and a fast response time.



The brain of the system is OMRON PLC, the ideal computer for an ROV due to its reliability and easy programming.





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