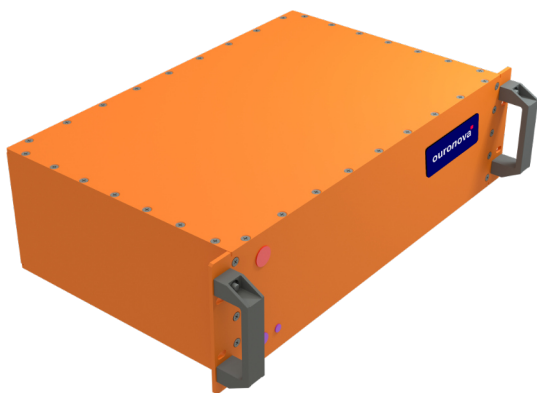


eSCM – Electronic Subsea Control Module

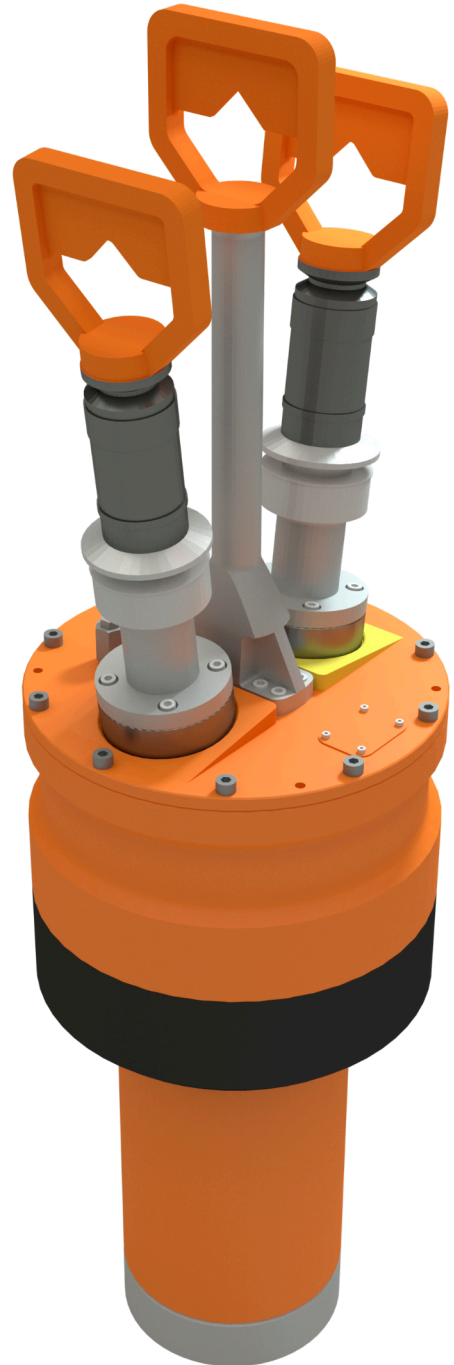
ouronova's Electronic Subsea Control Module (eSCM) is compatible with all intelligent well completion systems.

Composed of an Electric Power Unit (EPU), a Power Line Modem (PLM) for communication over a 20 km range and data storage capacity, **ouronova's** eSCM manages a large number of communication and control signals in real-time and supplies power for downhole equipment. The canister can be replaced via ROV and its locking interface is compatible with TechnipFMC, AKER and OneSubsea wet christmas tree.

The communication between subsea and topside modules is via a PLM in a transparent link for IWIS card and for HMI.



TOPSIDE

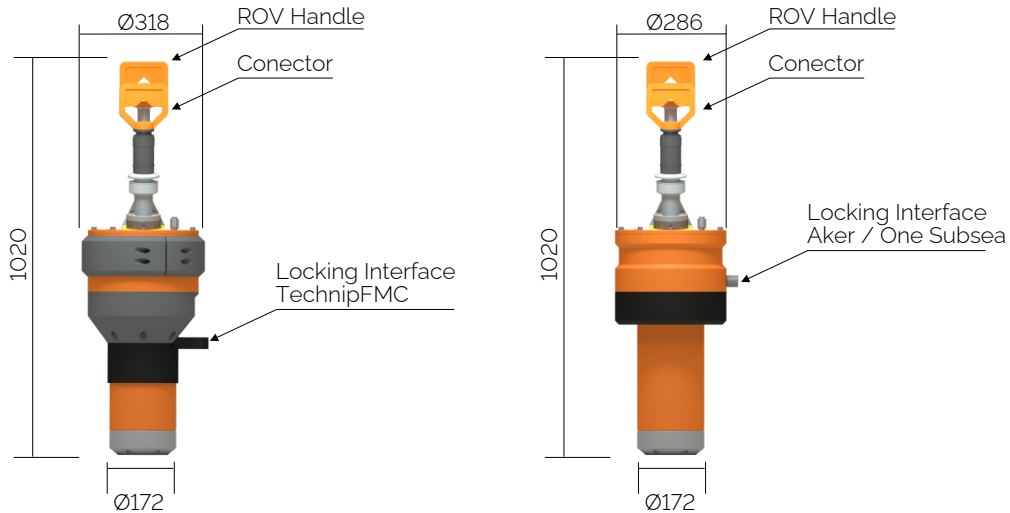


SUBSEA

Intelligent well completions

eSCM – Electronic Subsea Control

SPECIFICATIONS SUBSEA



ENVIRONMENTAL

Operational Temperature	4° C – 45° C
Operational Depth	Up to 3,000 meters

MECHANICAL

ROV Handle	D-Handle
Coating	Epoxy
Metallurgy	AISI 4340
Cathodic Protection	Zinc / Aluminum (20 years)
Weight in air	100 kg
Weight in water	85 kg
Locking Interface	Compatible with TechnipFMC, AKER and OneSubsea

ELETRICAL

Input Voltage (Minimum / Maximum)	85 – 264 Vrms
Output Voltage	24 VDC
Frequency	47 - 63 Hz
Maximum Output Power	300 W
Electrical Interface	7-way connector
IWIS Standard	2 cards (4 DIN41612 connectors)

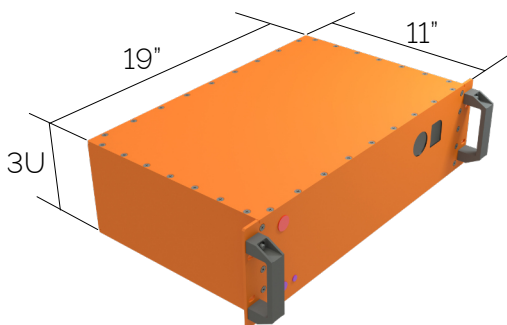
COMMUNICATION

Baud Rate (15 km)	19,200 – 56,000 bps
Transmission Interface	Ethernet

STANDARDS

API 17F
IWIS option 3

TOPSIDE SPECIFICATIONS



ENVIRONMENTAL

Operational Temperature	-10° C – 70° C
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MECHANICAL

Dimensions (L x H x W)	19" x 11" x 3U
Metallurgy	Aluminum Alloy
Coating	Epoxy
Protection Class	IP65

ELECTRICAL

Input Voltage (Minimum / Maximum)	85 – 264 Vrms
Maximum Consumption Power	500 W

COMMUNICATION

Baud Rate (15 km)	19,200 – 56,000 bps
Transmission Interface (HMI)	10 Mbit Ethernet
External Interface	Twisted Pair

STANDARD

IEC-60092-504
