

LARS 2.0 (1500) EX – DATASHEET

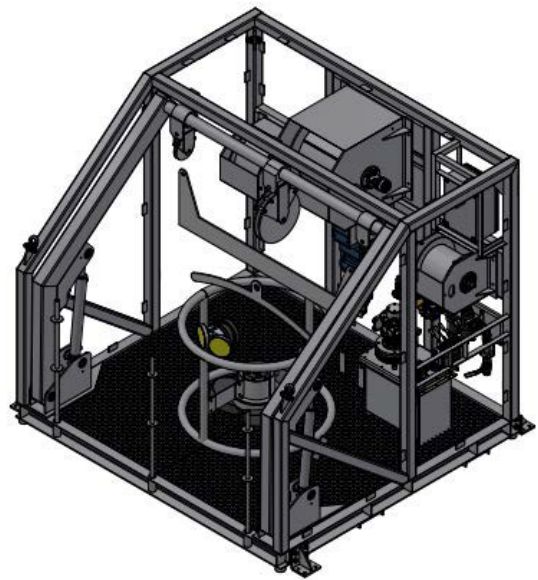
*For Acoustic Doppler Current Profiler (ADCP)
and Acoustic Current Meter (ACM) Sensors*

Overview:

The LARS 2.0 (1500kg) Ex is designed to redefine reliability and efficiency in deploying and recovering oceanographic sensors. This robust system supports sensors such as Acoustic Doppler Current Profilers (ADCP) and Acoustic Current Meters (ACM), ensuring operational excellence in challenging offshore conditions.

Why LARS 2.0?

- Designed for seamless immersion and recovery operations.
- Certified safety standards, including ATEX and CE compliance.
- User-friendly operation through an intuitive control panel.



System Highlights:

Superior Load Capacity:

- With a total SWL of 1500 kg, this system is optimised for demanding offshore tasks.

Advanced Safety Features:

- Includes ATEX Ex II 3G ck IIB T4 certification, stainless-steel protective grating, and CE compliance for safe and reliable operations.

Streamlined Operations:

- A state-of-the-art spooling device on the umbilical winch ensures precise and controlled cable handling.

Longevity and Durability:

- Crafted from marine-grade AISI 316 stainless steel, LARS 2.0 is built to withstand harsh marine environments.

Versatile Deployment:

- Supports deployment depths of up to 90 metres, depending on the installation height above the waterline.

Technical Specifications

System Capacity

- SWL: 2x 750 kg (Total 1500 kg at 8 bar air pressure)
- Dynamic Application Factor (DAF): 1.5

Dimensions and Materials

- Dimensions (L x W x H): 2520 mm x 2270 mm x 2250 mm
- Material: AISI 316 stainless steel

Power Requirements

- Air Pressure: 8 bar, 300 l/s (1000 m³/h)

	Instrument air pressure (bar)			
	5	6	7	8
SWL (kg)	935	1125	1310	1500

Key Features

A-Frame Handling System

- Outreach: ~2000 mm
- Hydraulic cylinders with load-holding valves for controlled A-frame operation

Dual Winch System

- Umbilical Winch:
 - Capacity: 100m of ø16mm cable
 - Pull-in speed: 0-0.4 m/s with constant tension operation
 - Spooling device for accurate cable handling
- Lifting Winch:
 - Capacity: 100m of ø10mm wire rope
 - Hydraulic fail-safe brake system

Hydraulic Power Unit (HPU)

- Converts air power to hydraulic pressure for smooth operation of winches and A-frame

Safety and Compliance

- Fully compliant with ATEX Ex II 3G ck IIB T4 and CE directives
- Equipped with stainless-steel protective covers over rotating components

Operational Life

- Design life: 20 years
- FEM Classification: M4-L2-T4