

Untethered Subsea Power

Utilizing Advanced Fuel Cell Technology



Applications

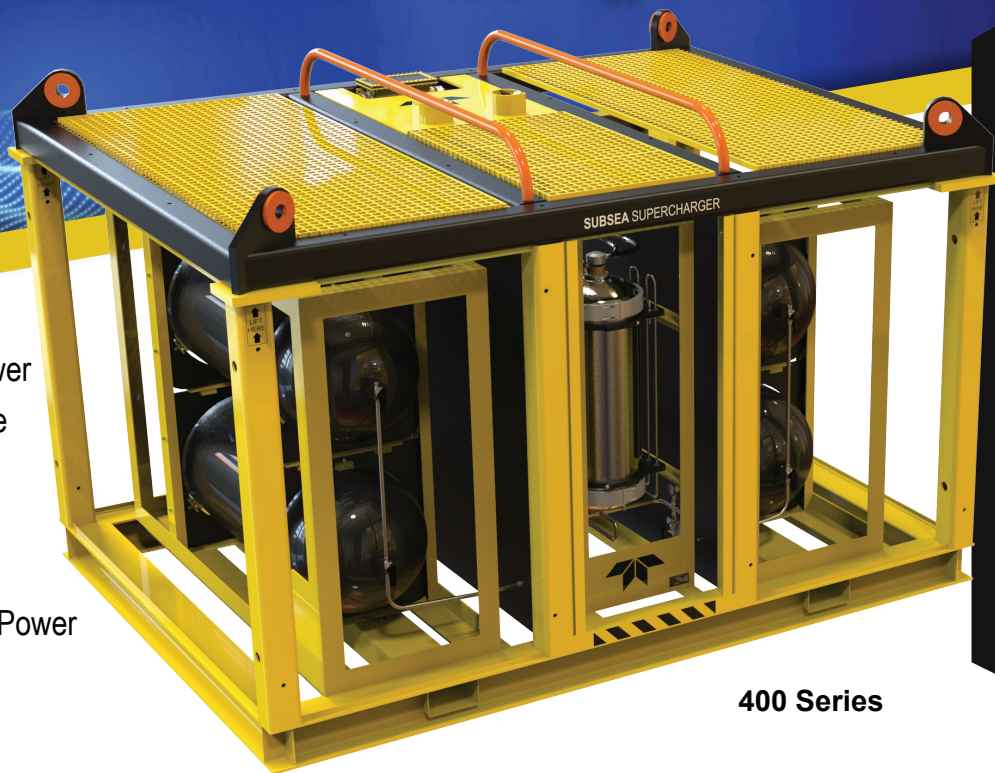
- Resident ROV Power
- ROV / UUV Charge
 Dock Power
- Remote Monitoring
- Remote Step-Outs
- Umbilical Back-up Power

Specifications

- 1 to 5 kW Power Output
- Up to 700 Volts
- Up to 30 MWh of Energy
- 1000 Meter Depth Rating

System Options

- Scalable Storage
- Teledyne Benthos Modem
- Sea Floor Recovery System
- Trawling Protection System
- Full Ocean Depth



Subsea Supercharger®

400 Series

Subsea Supercharger

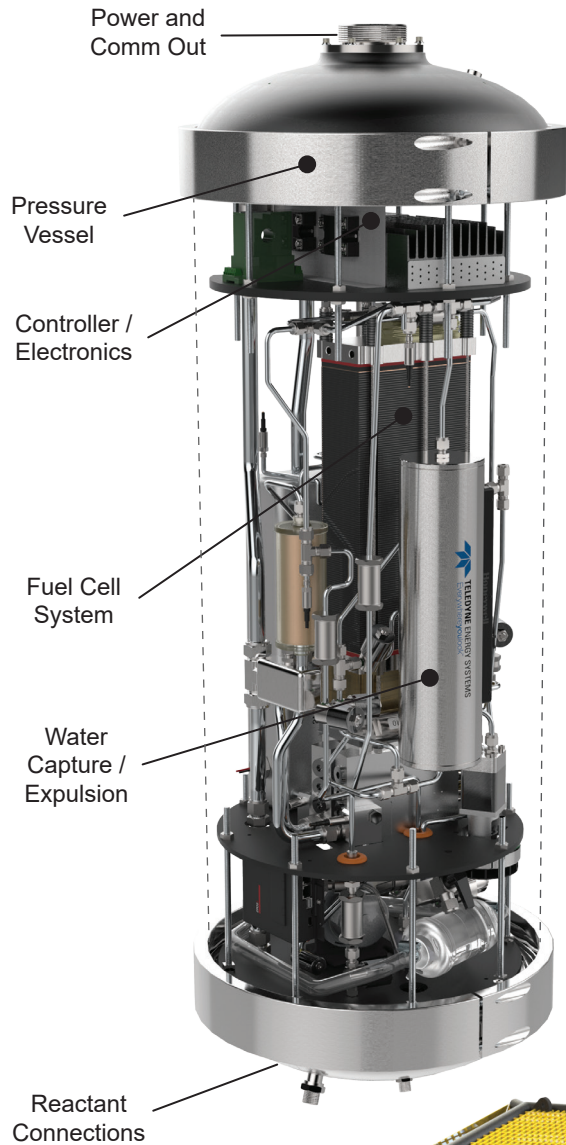
Designed to provide untethered subsea power, the Teledyne Subsea Supercharger is powered by advanced fuel cell technology. Our proven fuel cell system, specifically tailored for operation with pure oxygen, provides excellent efficiency and long operational life (>10,000 hrs.). The innovative fuel cell system features an integrated balance-of-plant (BoP) with ejector driven reactant (EDR) technology for reactant recirculation. The BoP allows the fuel cell stack to be fed reactants in a "dead-ended" configuration maximizing energy delivery.

Proven History

Let our heritage guide the way. Teledyne has a proven history of engineering and manufacturing high reliability, mission critical products for all types of harsh environments including NASA and other high profile customers.

www.teledynees.com

Supercharger® Specifications



1	EDR Fuel Cell System Module	Minimal components for maximum reliability
		5 kW power output (per module)
		Module capable of processing > 30 MWh of energy
		Operation to 1000 Meters
2	Hybridization / Power Conditioning Module	As required per application
3	Reactant Storage (H ₂ /O ₂)	Modular to meet energy and reactant storage system requirements.
4	Teledyne Benthos Acoustic Modem	Wireless data transfer through seawater. Significant cost savings over expensive underwater cabling.
5	Subsea Tested Components	Teledyne ODI wet mate connectors
		Electrical power and data transfer
	400 Series Skid Details	2.9 m X 3.9 m X 1.4 m
		6500 kg mass in air (3100 kg wet)
6	1000 Series Skid Details (DNV certified)	2.8 m X 5.9 m X 3.3 m
		Trawling config: 7 m X 9.7 m X 3.3 m
		11,100 kg mass in air (2,200 kg wet)
		Trawling config: 17,125 kg mass in air (6,700 kg wet)
7	Electrical Output	Voltage range: as specified
		Power: 1-10 kW continuous output
8	Trawling Protection	As required per application

