

EXploration Suit (EXS)

Pressure garment for space exploration

The EXploration Suit is an effective, safe, affordable, and reliable space suit system with a sustainable architecture for human exploration of our solar system. Space suits allow astronauts to exit the spacecraft to explore and investigate new locations and enable them to maintain and build new habitats in space. The EXploration Suit (EXS) is designed to enable safe and efficient Extra-Vehicular Activity (EVA) operations.



FEATURES

Rear entry suit for easy donning and doffing

Supports operating pressures from 4.3 to 8.3 psi

Improved liquid cooling capabilities

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The EXS was designed and developed by the C-SAFE team as part of NASA's Constellation Space Suit System (CSSS) Program. Led by Oceaneering, the team of experts in specialized technologies related to life support and personal mobility in hazardous environments worked to produce a suit to meet NASA's stringent requirements.

Access	Rear entry for easy donning and doffing
Operating pressures	4.3 - 8.3 psi
Suit components and features	<ul style="list-style-type: none"> » Elliptical helmet with permanent anti-fog coating » Hybrid upper torso (HyUT) » Enhanced shoulder joints for increased mobility » Liquid cooling garment with latest in performance fabrics and heat removal design
Power, Communications, and Avionics, and Informatics (PCAI)	Two independent power and data buses with separate batteries Software-defined radio with S-band and UHF capabilities (supporting communication, data, and video from the suit)
Suit control assembly	Provides astronaut with multi-page system that can display 8 lines of data
Suit display assembly	Provides astronaut with mission time-line, procedures, and suit data
Life Support System (LSS)	<ul style="list-style-type: none"> » O₂ tanks with an 8 hour nominal EVA capability and 1 hour emergency capability » Regenerable system for the removal of CO₂ and humidity » Suit Water Membrane Evaporator (SWME) provides cooling

■ For more information contact visit us at oceaneering.com/space-systems

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