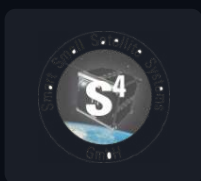


NEWSPACE MARKET · COMPANY PROFILE



S4 - Smart Small Satellite Systems GmbH

Germany · founded 2017 · s4-space.com

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WITH DATASHEETS

newspacemarket.com/companies/smart-small-satellite-systems-s4/

as of 20 August 2026



S4 - Smart Small Satellite Systems GmbH

S4 - Smart Small Satellite Systems GmbH is a German SME founded in 2017 and headquartered in Wuerzburg, Bavaria, closely affiliated with the Zentrum fuer Telematik GmbH. The company grew out of the team that designed, built and operated the first German pico-satellite, UWE-1, in orbit in 2005, and has since implemented and flight-tested essentially all core small-satellite subsystem functions in orbit. Team heritage also includes traditional missions such as Cassini/Huygens, Rosetta, ERS-1 and Cluster. S4 specializes in commercial, advanced pico- and nano-satellite hardware for the New Space market: standardized UNISec Europe CubeSat bus components, ultra-low-power redundant on-board computers, compact reaction-wheel-based 3-axis attitude control systems, and complete tailored small satellite systems typically in the 1-20 kg range. The company operates advanced dynamic test facilities, including two high-precision, high-dynamics turntables used for inter-satellite link testing, photogrammetric simulation, and AOCS characterization. Flight heritage includes continuous in-orbit operation of its on-board computer since a 2013 launch, and contributions to reference missions such as NetSat (4-satellite formation flight demonstration, launched 2020), CUBE (quantum key distribution technology demonstration), CloudCT (10-satellite cloud tomography formation), and TOM (Telematics Earth Observation Mission). Reference customers and partners include ESA, DLR, the European Research Council, IABG, OHB, Airbus Defence & Space, TU Muenchen, and LMU Munich.

This profile is generated from the live NewSpace Market catalogue. Specifications are as published by the manufacturer; every product links to a page where a request for quotation reaches the company directly.

SERVICES

Services

Small Satellite Test Facilities

S4 offers its high-performance facilities for small satellite tests as a service to customers.

Product catalogue



S4 - SMART SMALL SATELLITE SYSTEMS GMBH

Robust On-Board Data Handling Unit

A radiation-tolerant On-Board Data Handling (OBDH) unit that uses software-based fault protection and commercial components, offering standard UNISEC bus interfaces for satellite i

Radiation protection approach	Software-based, using advanced FDIR and redundancy
Component type	Commercial (COTS) chips
Flight heritage	More than 5 years without any interruption of service in polar LEO
Bus interface	Standard UNISEC bus electrical interfaces

price on request

datasheet



S4 - SMART SMALL SATELLITE SYSTEMS GMBH

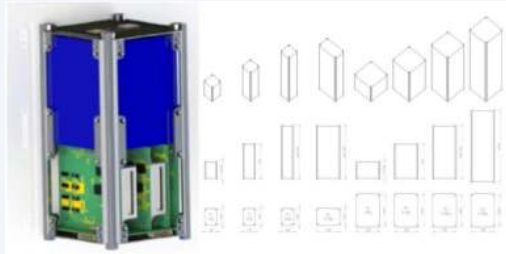
Robust On-Board Data Handling Unit (OBC)

Ultra-low-power, dual-redundant 16-bit RISC on-board computer for CubeSats with flight heritage since 2013.

Power consumption	< 15 mW
Power supply	3.3 V
Backup power supply	3.3-9 V
Mass	38 g
Dimensions	90 x 90 x 6.9 mm
Program memory	2 x 256 KB
S-RAM	2 x 16 KB

price on request

datasheet



S4 - SMART SMALL SATELLITE SYSTEMS GMBH

Tailored Small Satellite Systems

Complete, custom-tailored small satellite systems from 1-20 kg accommodating customer payloads at minimum mass.

Mass range	1-20 kg (typical 1-10 kg depending on payload)
Standard dimension range	1U (~1 kg) up to 12U-class custom form factors
Heritage	In-orbit telecom experiments since 2005; pico-satellite realizations since 2003; tradition

price on request [datasheet](#)



S4 - SMART SMALL SATELLITE SYSTEMS GMBH

UNISEC Europe Bus Starter Kit

Development kit for the standardized UNISEC Europe CubeSat bus, providing a satellite development board, subsystem prototype, and software starter kit for rapid CubeSat prototyping

Satellite bus connector	Compact/robust backplane, redundant power + high/low-speed digital buses, dedicated reset/
External debug interface	UART via USB bridge; JTAG, SBW, SWD programming/debugging; USB power supply (5V, 3.3V, unr
Power control circuit	OBC-controlled via redundant I2C, power switch, voltage/current monitoring, over/under-vol
Interface control circuit	Selective bus isolation, prevents current leakage during partial power down, OBC-controlle

price on request [datasheet](#)

Contact S4 - Smart Small Satellite Systems GmbH

Open the company profile on NewSpace Market to see full specifications and datasheets, and to send a request for quotation that reaches the manufacturer directly.

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