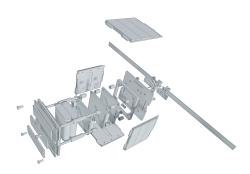
## **QUBIK** BUS

The QUBIK platform is a PocketQube satellite bus specifically designed for fast, reliable and affordable space missions.

The miniaturized satellite platform can be used reliably in a variety of mission concepts and orbital profiles.

QUBIK is fully compatible with SatNOGS Network for all TMTC functionality. The software and hardware are released as open source projects, which can be tailored to user needs.

QUBIK is a TRL8 technology, already tested and delivered for 5 different orbital missions since 2021.



**Libre Space** Foundation

## QUBIK KEY FEATURES

On Board Computer / Communications	<ul> <li>PQ9ISH-COMMS combined OBC/COMMS subsystem</li> <li>STM32L4 ARM® Cortex®-M4 based microcontroller with AX5043 RF transceiver</li> <li>UHF Band, Half-duplex operation</li> <li>GMSK/GFSK,BPSK,QPSK modulation with up to 125 kbps data rates</li> <li>CCSDS, IEEE 802.15.4, AX.25 encapsulations</li> <li>Interfaces: CAN, UART, I2C, OneWire options available</li> <li>Dipole Antenna with deployment mechanism</li> </ul>
Power	<ul> <li>3.3V@1A power max</li> <li>Battery 1C or 2C options with 3.7Wh per cell</li> <li>570mW per solar panel (inc MPPT) at nominal solar flux</li> </ul>
Payload	<ul> <li>Dimensions 42x42x10mm         <ul> <li>Second payload possible when 1C battery selected</li> </ul> </li> <li>PQ9 mechanical and PQ9ISH electrical standard</li> <li>Max mass 50g         <ul> <li>25g more available when 1C battery selected</li> </ul> </li> </ul>
Attitude	No active attitude control, aerodynamic restoring torque design
Environmental	Operating Temperature: -40 to +85 °C
Mass	250 g total with payload
Dimensions	<ul><li> 50x50x50 mm (and 58x64x1.6mm backplate)</li><li> Compatible with all PocketQube deployers</li></ul>
Availability	10 weeks lead-time
Options	<ul><li>Custom development to fit payload needs</li><li>2p and 3p configurations available upon request</li></ul>