

NEWSPACE MARKET · COMPANY PROFILE



CubeSpace ADCS

South Africa · cubespace.co.za

15

PRODUCTS

5

SERVICES

newspacemarket.com/companies/cubespace-adcs/

as of 20 August 2026



CubeSpace ADCS

CubeSpace is a South African company specializing in Attitude Determination and Control Systems (ADCS) for small satellites. The company's Turn-Key ADCS simplifies a complex subsystem into a customizable, plug-and-play solution featuring integrated closed-loop control algorithms honed through more than a decade of flight heritage. Over the past 10 years, CubeSpace has refined its ADCS systems to achieve unmatched modularity and maturity. The systems integrate seamlessly with a customer's on-board computer (OBC), adapt easily to a wide range of satellite mechanics and electronics, and support distributed node architectures. CubeSpace's product range spans reaction wheels, magnetorquer rods, deployable and temperature-calibrated magnetometers, high-accuracy sun sensors, IR earth horizon sensors, and compact star trackers. The company also supports integration of third-party hardware to scale ADCS solutions to specific mission requirements, with tried-and-tested control modes and firmware upgradeability (including the bootloader) that make its systems a reliable choice for satellite missions of varying complexity.

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

ADCS Component Selection and Sizing

We advise on the selection and sizing of sensors and actuators for your satellite's ADCS, identifying any necessary third-party components.

Customization of Mechanical and Electrical Interfaces

We customize the mechanical and electrical interfaces of the Turn-Key ADCS to ensure compatibility with your satellite.

In-Orbit Performance Estimation

Using your satellite specifications and selected components, we estimate your satellite's performance in orbit.

In-Orbit Support

Our team of experts provides high-priority standby support for your satellite once it is in orbit.

Integration and Commissioning Support

We offer support for integrating our ADCS solution into your satellite and commissioning it for operation.

Product catalogue



CUBESPACE ADCS

Fine Sun Sensor – CubeSense Sun

CubeSense Sun is a high-accuracy CMOS-based fine sun sensor with a wide field of view (FOV). Optimized for low power consumption, it features a pre-calibrated distortion model,...

Manufacturer	CubeSpace
Lead Time	12 weeks

price on request



CUBESPACE ADCS

Infrared (IR) Earth Horizon Sensor

The CubeSense Earth is a compact and reliable infrared earth horizon sensor providing high-accuracy nadir determination for satellite control, especially in eclipse, without needin

Accuracy [*]	1° (roll and elevation) 3-sigma
Max slew rate [°/s]	14
Mass [g]	18
Dimensions [WxHxL] [mm]	35x24x20
Detection field of view [°] (Horizontal/vertical)	90/80
Detection field of view [°] (Diagonal)	90
Data bus*	CAN/UART/RS-485 **I2C available for custom solutions

price on request



CUBESPACE ADCS

Magnetometer (Compact & Deployable)

A robust 3-axis controlled magnetometer available in compact and deployable form factors, designed for satellite attitude determination and control systems.

Noise per channel [3-sigma] [nT]	50 (Magnetometer Deployable)
Noise per channel [3-sigma] [nT]	120 (Magnetometer Compact)
Linearity [full scale] [%]	0.6 (Magnetometer Deployable)
Linearity [full scale] [%]	0.6 (Magnetometer Compact)
Sensitivity [nT]	13 (Magnetometer Deployable)
Sensitivity [nT]	25 (Magnetometer Compact)
Field Measurement Range [G]	±8 (Magnetometer Deployable)

price on request



CUBESPACE ADCS

Magnetorquer Rods (CR0002-CR0020)

CubeSpace Magnetorquer Rods are space-proven magnetic torquers designed for satellite attitude control, featuring a compact design, robust mounting, and a range of magnetic moments

Max Voltage [V] (CR002)	5
Max Voltage [V] (CR003)	5
Max Voltage [V] (CR004)	5
Max Voltage [V] (CR005)	5
Max Voltage [V] (CR006)	5
Max Voltage [V] (CR0010)	5
Max Voltage [V] (CR0012)	5

price on request



CUBESPACE ADCS

Reaction Wheel (CW40K) (4Nms)

CubeSpace (CS) offers a wide range of robust reaction wheels perfect for CubeSats and SmallSats. Our reaction wheel range is designed for precision performance, reliability, ease...

Manufacturer **CubeSpace**

Lead Time **12 weeks**

price on request



CUBESPACE ADCS

Reaction Wheel CW0017

CubeSpace (CS) offers a wide range of robust reaction wheels perfect for CubeSats and SmallSats. Our reaction wheel range is designed for precision performance, reliability, ease...

Manufacturer **CubeSpace**

Lead Time **12 weeks**

price on request



CUBESPACE ADCS

Reaction Wheel CW0057

CubeSpace (CS) offers a wide range of robust reaction wheels perfect for CubeSats and SmallSats. Our reaction wheel range is designed for precision performance, reliability, ease...

Manufacturer **CubeSpace**

Lead Time **12 weeks**

price on request



CUBESPACE ADCS

Reaction Wheel CW0162

CubeSpace (CS) offers a wide range of robust reaction wheels perfect for CubeSats and SmallSats. Our reaction wheel range is designed for precision performance, reliability, ease...

Manufacturer **CubeSpace**

Lead Time **12 weeks**

price on request



CUBESPACE ADCS

Reaction Wheel CW0500

CubeSpace (CS) offers a wide range of robust reaction wheels perfect for CubeSats and SmallSats. Our reaction wheel range is designed for precision performance, reliability, ease...

Manufacturer **CubeSpace**

Lead Time **12 weeks**

price on request



CUBESPACE ADCS

Reaction Wheel CW10k (1 Nms)

CubeSpace (CS) offers a wide range of robust reaction wheels perfect for CubeSats and SmallSats. Our reaction wheel range is designed for precision performance, reliability, ease...

Manufacturer **CubeSpace**

Lead Time **12 weeks**

price on request



CUBESPACE ADCS

Reaction Wheel CW1200 (0.12 Nms)

CubeSpace (CS) offers a wide range of robust reaction wheels perfect for CubeSats and SmallSats. Our reaction wheel range is designed for precision performance, reliability, ease...

Manufacturer	CubeSpace
Lead Time	12 weeks

price on request



CUBESPACE ADCS

Reaction Wheel CW2500 (0.25 Nms)

CubeSpace (CS) offers a wide range of robust reaction wheels perfect for CubeSats and SmallSats. Our reaction wheel range is designed for precision performance, reliability, ease...

Manufacturer	CubeSpace
Lead Time	12 weeks

price on request



CUBESPACE ADCS

Reaction Wheel CW5000 (0.5 Nms)

CubeSpace (CS) offers a wide range of robust reaction wheels perfect for CubeSats and SmallSats. Our reaction wheel range is designed for precision performance, reliability, ease...

Manufacturer	CubeSpace
Lead Time	12 weeks

price on request



CUBESPACE ADCS

Star Tracker – CubeStar

CubeStar is a medium-to-high accuracy miniature star tracker equipped with an external thread for the easy integration of a mission-specific baffle, allowing you to customize the...

Manufacturer	CubeSpace
Lead Time	16 weeks

price on request



CUBESPACE ADCS

Turn-Key ADCS

CubeSpace's Turn-Key ADCS is a space-proven, plug-and-play attitude determination and control system for CubeSats and SmallSats, available in integrated (3-6U) and distributed (lar

Technology readiness level	TRL 9 (flight-proven)
Form factor	Integrated for 3U-6U CubeSats; distributed for larger SmallSats
Actuators	Reaction wheels (with optional integrated damping), magnetorquer rods
Sensors	Star trackers, fine/coarse sun sensors, earth horizon sensors, magnetometers, gyroscopes,
Mission modes	Detumbling, sun-spin, earth target tracking, TDI imaging, inter-satellite tracking
Fault handling	Built-in Fault Detection, Isolation and Recovery
Lead time	16 weeks

flight proven · TRL 9

price on request

Contact CubeSpace ADCS

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.

<https://newspacemarket.com/companies/cubespace-adcs/>

<https://www.cubespace.co.za>

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