

Gemeinschaftsprojekt von:



cyber motor



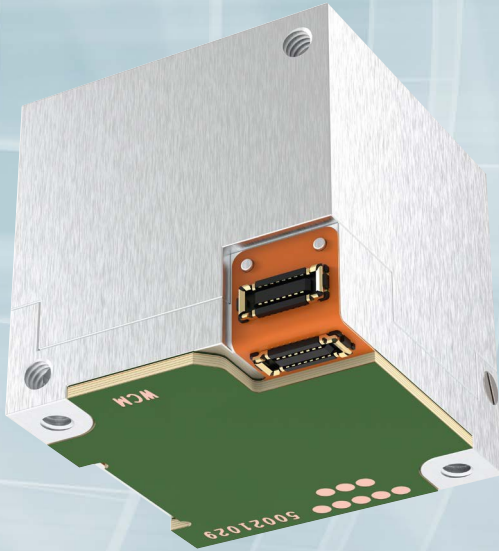
ZENTRUM  
FÜR  
TELEMATIK E.V.

# cyber<sup>®</sup> reaction wheel 2

+ compact



+ efficient

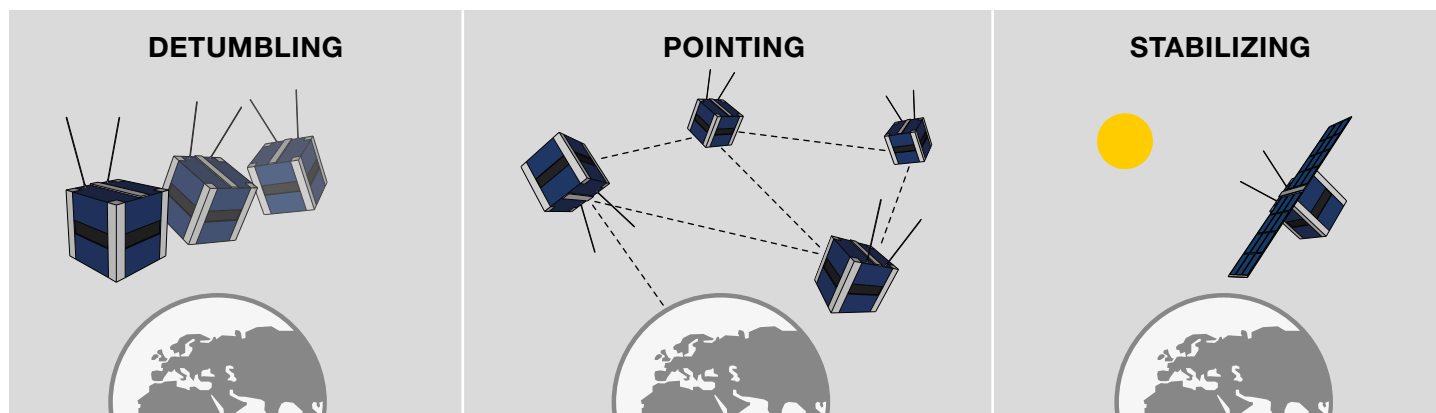


+ durable

+ connective

+ robust

# Excellent solution for ambitious missions



## Robustness

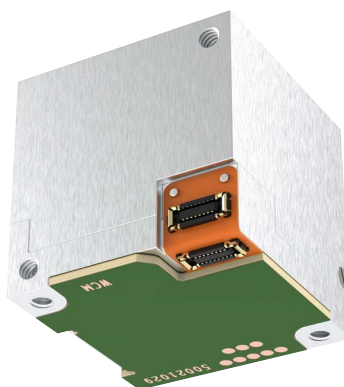
Vacuum up to  $10^{-8}$  mbar  
Temperature  $-60^{\circ}\text{C}$  to  $+100^{\circ}\text{C}$

## Efficiency

Power consumption  $< 200$  mW

## Durability

Lifetime 5 years



## Compactness

Momentum storage  $> 2$  mNms  
 $20 \times 20 \times 20$  mm square design  
For 1U to 8U cubesats

## Connectivity

Integrated drive electronic with  
I2C, UART, SPI interface

Technical data	
Dimensions	20 x 20 x 20 mm
Mass	30 g
Momentum storage @ nominal voltage	2,0 mNms
Nominal power consumption (@8.000rpm)	200 mW
Max. power consumption (adjustable)	650 mW
Max. rotation rate	20.000 rpm
Operating voltage	3 to 8,8V
Nominal voltage	5V
Radiation resistance	$> 200$ Gy
Vacuum resistance	$10^{-8}$ mbar
Operating temperature	$-40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$
Survival temperature	$-60^{\circ}\text{C}$ to $+100^{\circ}\text{C}$

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