



WITTENSTEIN

cyber motor

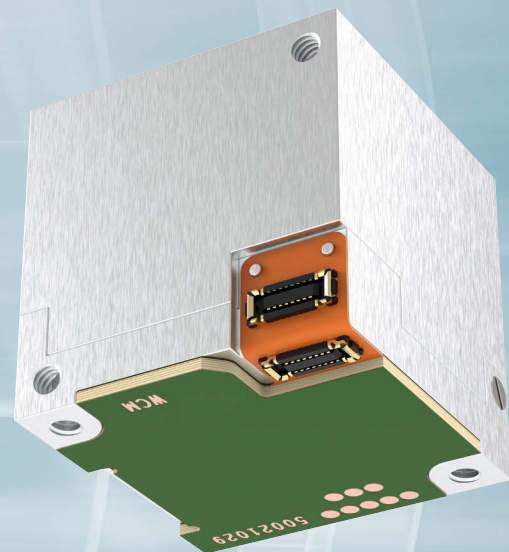
## cyber<sup>®</sup> reaction wheel 2

efficient  
compact  
robust

+ compact

+ connective

+ durable

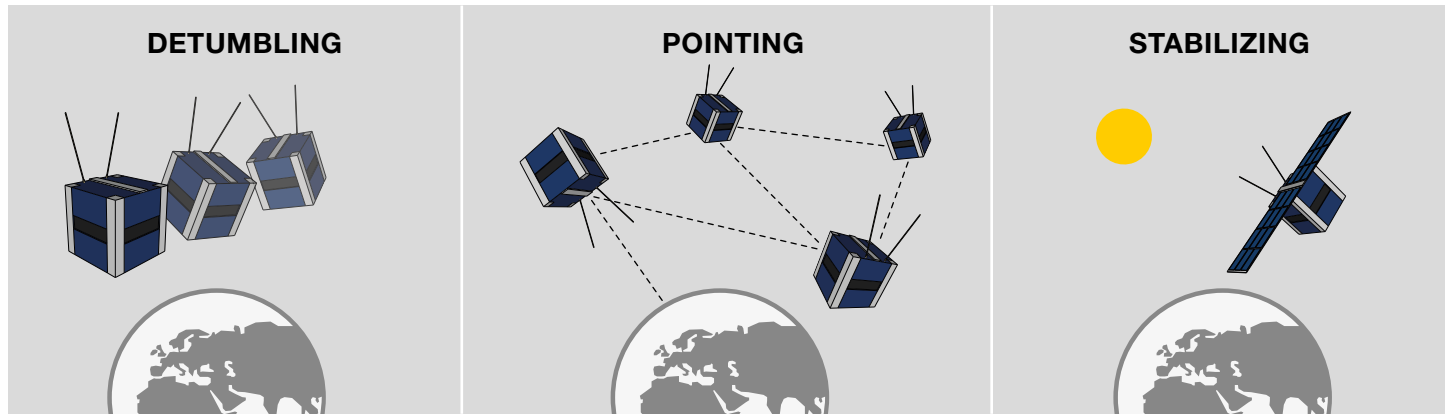


+ efficient

+ robust



# Excellent solution for ambitious missions



## Robustness

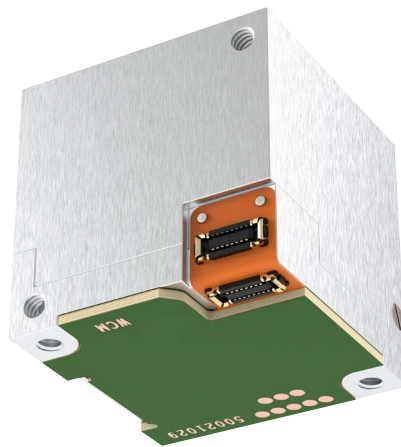
Vacuum up to  $10^{-8}$  mbar  
Temperature  $-60^{\circ}\text{C}$  to  $+100^{\circ}\text{C}$

## Efficiency

Rated power consumption 480 mW  
(@2 mNms)

## 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  |
| Rated power consumption (@2 mNms)     | 480 mW  |
| Peak power consumption (configurable) | <1500 mW  |
| Max. rotation rate                    | 18.000 rpm                                      |
| Operating voltage                     | 3 to 8,8 V                                      |
| Nominal voltage                       | 5 V   |
| 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 $+100^{\circ}\text{C}$ |