

LOW PROFILE



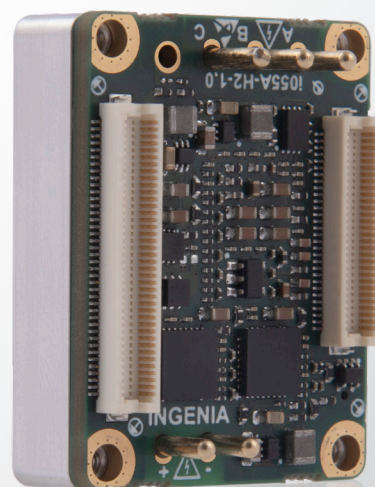
**Ingenia**  
*Servo Drives*

# Capitan Series Servo Drives

Unsurpassed Performance,  
Ultra Efficient, Low Profile  
Servo Drives

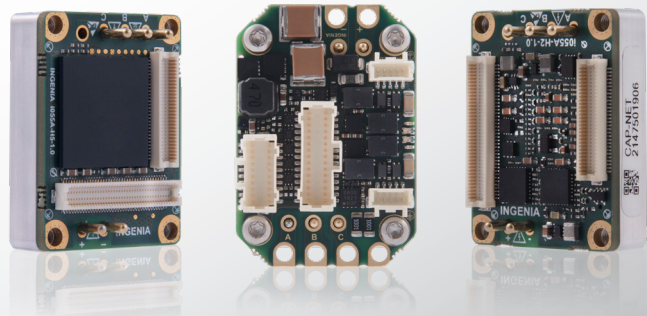
Drive your next generation robot with the Capitan Series that delivers unsurpassed performance and smart integration capabilities.

› [CELERAMOTION.COM](http://CELERAMOTION.COM)



# Capitan Series Servo Drives

Unsurpassed Performance, Ultra Efficient, Low Profile Servo Drives



## Premium Performance and Ultra-low Profile.

The Capitan Series servo drives are ultra compact, high-power density, and super efficient. An extremely low profile and lightweight design, allows for easy integration in compact robotic joints, flat actuators, end-effectors, surgical robots, exoskeletons, gimbals, and haptic applications.

Designed with the most advanced transistor technology in the world, experience the highest power density and efficiency. Communications latency has been optimized to maximize system responsiveness. Standby power consumption has been reduced to minimize heat generation, and firmware architecture has been designed to accommodate PWM frequencies up to 200 kHz with maximum bus voltage utilization, enabling low inductance motor control. Communication options include EtherCAT, CANopen, and SPI.

### Benefits

- Compact and lightweight
- Super-flat design
- Ultra-low standby power consumption
- PWM frequency up to 200 kHz for low inductance motors
- Extremely fast servo loops for smooth operation
- Minimum communication latency
- Dual loop support for unparalleled precision
- EtherCAT/CANopen versions available
- SPI communications interface for optimized multi-axis architectures
- Highest efficiency up to 99%
- Functional safety STO SIL3 Ple

| Specifications             | XCR   | NET   | CORE  |
|----------------------------|---|---|---|
| Supply Voltage:            | Power: 8 to 60 V <sub>DC</sub><br>Logic: 8 to 50 V <sub>DC</sub> (optional)           | Power: 8 to 60 V <sub>DC</sub><br>Logic: 8 to 50 V <sub>DC</sub>                      | Power: 8 to 60 V <sub>DC</sub><br>Logic: 8 to 50 V <sub>DC</sub>                      |
| Continuous Current:        | 10 A  | 10 A  | 10 A  |
| Standby Power Consumption: | 1.5 to 2.1 W  | 1.28 W  | 1.12 W  |
| PWM Switching Frequency:   | 20, 50, 100, 200 kHz  | 20, 50, 100, 200 kHz  | 20, 50, 100, 200 kHz  |
| Motor Type:                | DC Brushed, Rotary Brushless  | DC Brushed, Rotary Brushless  | DC Brushed, Rotary Brushless  |
| Feedback:                  | Digital Halls, Quadrature Incremental Encoder, BiSS-C, Dual BiSS-C Daisy-Chained, SSI | Digital Halls, Quadrature Incremental Encoder, BiSS-C, Dual BiSS-C Daisy-Chained, SSI | Digital Halls, Quadrature Incremental Encoder, BiSS-C, Dual BiSS-C Daisy-Chained, SSI |
| Communications:            | EtherCAT, CANopen   | EtherCAT, CANopen   | SPI   |
| Dimensions*:               | 42 mm x 29 mm x 19.4 mm   | 34.5 mm x 26 mm x 10.3 mm   | 34.5 mm x 26 mm x 10.3 mm   |
| Weight:                    | 38 g  | 18 g  | 18 g  |

\*See product manual for dimension levels.  
Specifications subject to change.



**Ingenia**  
Servo Drives

Carrer d'Àvila 124, 2<sup>o</sup>B | Barcelona, 08018 Spain  
Tel.: +34.932.917.682 | [innovation@celeramotion.com](mailto:innovation@celeramotion.com) | [celeramotion.com](http://celeramotion.com)