

CAN Newsletter Online

SERVO-DRIVE CYLINDER

For in-door, out-door, and under-water use

Ultra Motion's Servo Cylinders are available with CANopen and J1939 connectivity. The CANopen variant implements the CiA 402 CANopen device profile for drives and motion controllers.



Use of CAN interface allows controlling and logging of actuator's real-time position, current, voltage, temperature, status, etc. (Source: Ultra Motion)

The devices can be used in a wide range of automation systems from commercial autopilots or J1939-based systems to test setups or other control solutions. The CAN interface is available on all models including submersible (AU series) and shock/vibration hardened (AM series) servo cylinders. The device variants provide an ingress protection of IP50 to IP67 as well as diverse housing and connector options. The use of the CAN interface allows a detailed logging of actuator telemetry such as real-time position, current, bus voltage, temperature, and status for preventative maintenance, post-flight analysis, and real-time control adjustments.

The CANopen-capable servo cylinders support the cyclic synchronous position mode and profile position mode as specified in CiA 402. The CiA 402 device profile for drives and motion controllers is internationally standardized in IEC 61800-7-2/-3

and is further developed by CAN in Automation (CiA). The devices also provide a half-duplex EIA-485 serial command line interface (CLI) for diagnostics, configuration, and field updating of the firmware. In common, the cylinders can be controlled through a terminal program (e.g. Putty), a PLC, or other programs for serial communication ports (e.g. Labview, Matlab, Python, etc.).

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