

Rugged Digital Servo Drives for Aerospace and Defense

For over 40 years, Copley Controls has designed and delivered high-performance motion control solutions for the defense sector. Our ruggedized drives power precision systems across military vehicles, aircraft, naval platforms and weapons systems, demonstrating the highest reliability in the world's harshest environments.

FIELD-TESTED DURABILITY

- Operates -40°C to +70°C with 1-minute thermal shock capability.
- Withstands 40g shock and extreme vibration up to 3.85 grms.
- Functions at altitudes from -400 to 16,000 meters.
- Survives 95% humidity in corrosive environments.

FULL MIL-SPEC COMPLIANCE

Drives are designed to exceed MIL-STD-810, 1275, 704, 461 and 1399 standards. They are also ISO 9001:2015 certified and manufactured in the USA for defense procurement compliance.

INTEGRATION FLEXIBILITY

Drives support multiple communication protocols (CANopen, EtherCAT, RS-232/422), a wide range of encoder (absolute and incremental) and resolver feedback options, and both AC and DC power configurations for seamless integration into any defense platform.











PRODUCTS FOR AEROSPACE AND DEFENSE

	R10 Xenus	R11 Xenus	R23 Accelnet	R43/R44 AccelnetPLUS	R70/R71 Argus ^{PLUS}
Current	6-20A cont. 18-40A peak	5A cont. 10A peak	2-15A cont. 6-30A peak	7-50A cont. 14-50A peak	30A cont. 60A peak
Voltage	100-240V AC	100-240V AC	14-90V DC	9-180V DC	9-90V DC
Dimensions (mm)	191×140×64	126×90×53	64×41×16	64×41×17.6	79×60×23
Communication	CANopen, RS-232, RS-422	CANopen, RS-232	CANopen, RS-232	CANopen, RS-232, ASCII/Serial binary, EtherCAT	CANopen, RS-232, ASCII/Serial binary, EtherCAT
Feedback	 Digital quad A/B encoder Digital halls Sin/Cos Resolver (CSR) 	Digital quad A/B encoder Digital halls Sin/Cos Resolver (CSR)	 Digital quad A/B encoder Digital halls Sin/Cos Resolver 	 Incremental encoder Digital halls BiSS, SSI, absolute A, EnDat Analog Sin/Cos Dual loop feedback 	 Incremental encoder Digital halls BiSS, SSI, absolute A, EnDat Analog Sin/Cos Resolver
Additional Design Standards	In addition to MIL-STD standards, our drives are designed to adhere to a variety of industry standards, including IEC-60079 for explosive gas atmospheres, IEC-60068 for environmental testing and UL/IEC 61010-1. They are also designed to meet UL/IEC 61800-5-1, UL/IEC 61800-5-2 and IEC 61800-3.				

CONTACT OUR MOTION CONTROL SPECIALISTS TODAY TO DISCUSS YOUR DEFENSE APPLICATION REQUIREMENTS