

Torque, Linear and Custom Motors

Stepper, Servo and Traction Motors

Drive Electronics and Controllers

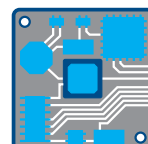
Actuators and Sensors

CAE Tools and Engineering

Motion Control Systems

MOTOR CONTROLLERS

Standard & Bespoke Designs



*Drive Electronics
to match!*

MACCON – STANDARD & BESPOKE DESIGNS

CONTROLLER PORTFOLIO

MACCON & Partners

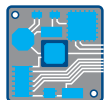
Our Partners for Drives

- Copley Controls
www.copleycontrols.com
- Ingenia
www.ingeniamc.com
- Kollmorgen
www.kollmorgen.com
- LTI Motion
www.lti-motion.com
- QCI
www.quicksilvercontrols.com
- Servotronics
www.servotronics.com

Drives Electronics to match

MACCON is expert in designing bespoke drives and inverters, exactly to user requirements. Customisation provides the best solution to form, fit or function as well as production cost requirements. It may give you a competitive advantage in your industry, e.g. a private label solution.

Often this design approach is the only way to accommodate special restrictions with regard to dimensions, functionality and/or environmental demands.



Drive Electronics to match!

MACCON and our partners

We not only supply electric motors in the power range up to 250 kW but also drives to control them. These drives offer high performance, high power density and powerful control features for most motor technologies including servo motors (DC brush and brushless) and step-motors (micro-stepping and hybrid-servo).

Continuous operating voltages range from 12 - 650 V and RMS phase currents from 3 to 450 A.



150 kVA Traction drive (MACCON)



42 kVA controller (Kollmorgen)



Motor controller modules (Copley)

Mini OEM controller (Ingenia)

Our Partners for Drives



MACCON – STANDARD & BESPOKE DESIGNS

STANDARD SERVO DRIVES for Industry and Automation

Control Interfaces

Our drives support a wide selection of host control interfaces, including:

- RS232/RS442
- CANbus, CANopen or Private CAN
- USB
- EtherCAT
- Ethernet/IP
- Profibus
- MILbus



Servostar GUI (Kollmorgen)

Feedback Interfaces

Our drives also support a wide selection of feedback devices, including:

- Resolver (brushless and reluctance), MoSolver
- Incremental encoder: A/B/Z, Sine/Cosine, MR
- Absolute encoder: EnDat, SSI, BiSS, Hiperface
- Analog
- Temperature sensors
- Switches, limit and reference
- Digital inputs and outputs



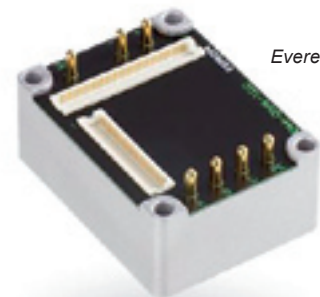
Argus controller
(Copley)



Servostar drive family (Kollmorgen)



2-Axis XENUS controller
(Copley)



Everest (Ingenia)



ServoONE family (LTI)

MACCON – STANDARD & BESPOKE DESIGNS

BESPOKE MOTOR CONTROLLERS

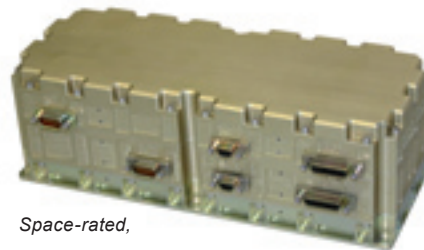
Vehicles, Defence, Aerospace etc.



Ruggedised controller (MACCON)



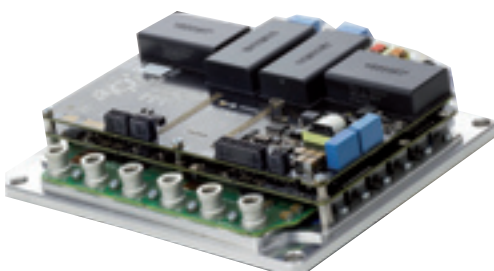
Ruggedised controller (Copley)



Space-rated, redundant controller (MACCON)



Distributed motor controllers (Kollmorgen)



High power controller (Ingenia)



MACInverter controller (MACCON)

MACInverter

MACInverter is an FPGA-based, modular servodrive platform. It comprises several building blocks (hardware, soft- and firmware) which can be quickly and easily combined to create a customerspecific servodrive, thus shortening time-to-market.

Customised servo-algorithms can be modelled in Simulink (Activate) and directly converted into MACInverter code by means of the HDL-coder from MATLAB.

MACInverter can solve customer specific drive problems with special functional or topology requirements at any power level, quickly, effectively and with a minimum of development risk.

Space

MACCON has electronics in Space. Our 2-channel, redundant MCDE includes power, position feedback, control and host interfacing (SpaceWire). It has been operating successfully in orbit for many years.

MACInverter Development Tool



MACCON – STANDARD & BESPOKE DESIGNS

DRIVE & CONTROL APPLICATIONS

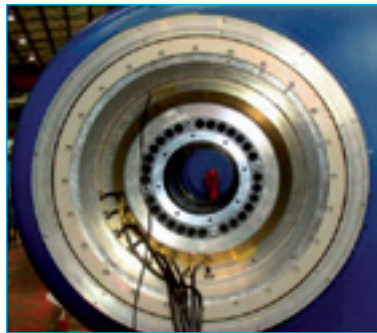
Drives in Action

Extreme Environments

Many of our drive systems are employed under and need to withstand harsh environmental conditions, such as shock, low temperatures and vacuum. Our “Spinning Antenna” drive, including our SWM motor controller, has been qualified for deployment on a drone in the upper atmosphere, at -60 °C and low air-pressure.

Just as for our motors, the requirements for our drives can be very special.

Here we present just some of many application examples for our Motion Control products, Know-how and Services.



Direct drive for Gondola (MACCON)



SOFIA motor control rack (MACCON)



Differential traction (MACCON)

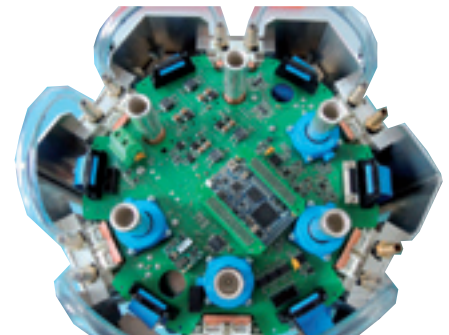
Astronomy

- Planetarium projection positioning



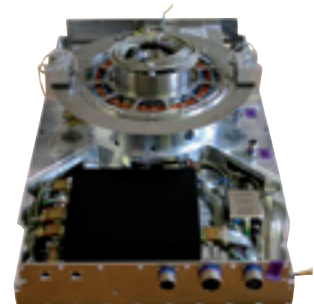
Planetarium projector

- Underwater propulsion



120 kVA controller (MACCON)

- Airborne Radar



Spinning Antenne drive (MACCON)

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Actuators and Sensors	Fax 089/65 52 17
CAE Tools and Engineering	sales@maccon.de
Motion Control Systems	www.maccon.de

Company Portrait

MACCON is a leading supplier of electric motors, EM-actuators, drive and control electronics in the range of 1 W to 250 kW. The company was founded in 1982.

MACCON provides drive solutions to meet demanding system requirements. We co-operate with many reputable product manufacturers, combining their high-quality products with our own custom-developed designs, to create high-performance yet cost-effective drive systems.

Our mission is to serve users in solving their real-time motion control problems in machines, processes and experiments. We ensure that the target machine exhibits:

- Precise, dynamic and smooth motion
- Compatibility with electrical and mechanical interfaces as well as with the host control
- Perfect adaptation to the physical environment

We are committed to providing our customers with top quality products and performance along with expert technical support. We strive to be the technical leader in motion control systems.

Firmenportrait

MACCON ist ein technisch führender Anbieter von Elektromotoren, EM-Aktuatoren, Antriebs- und Steuerelektronik in der Leistungsklasse 1 W bis 250 kW. Das Unternehmen wurde 1982 gegründet. MACCON löst anspruchsvolle Antriebsaufgaben, die hohe, technischen Anforderungen stellen. Wir arbeiten mit vielen renommierten Partnerunternehmen zusammen, deren hochwertige Produkte, kombiniert mit unseren eigenen Entwicklungen, die Realisierung leistungsfähiger und zugleich wirtschaftlicher Antriebssysteme ermöglichen.

Es ist unsere Aufgabe, Anwender bei der Lösung ihrer Echtzeitbewegungsprobleme in Maschinen, Anlagen und Experimenten zu unterstützen. Wir stellen in der Zielmaschine sicher:

- Eine genaue, dynamische und gleichläufige Bewegung
- Die Anpassung unserer Produkte an die Hoststeuerung sowie an die mechanischen und elektrischen Schnittstellen
- Eine perfekte Anpassung an die physikalische Umgebung

Wir sind dem Grundsatz verpflichtet, unseren Kunden sowohl eine erstklassige Produktqualität und -performance als auch eine gute technische Beratung zu liefern. Wir streben die fachliche Führung im Bereich der elektronischen Antriebstechnik an.

