NORCOMP

ROBOTIC INTERCONNECT SOLUTIONS

www.norcomp.net

Robotics

NorComp provides a wide range of standard and custom connector and cable solutions for robotics applications.

Industrial robotic devices are highly complex electromechanical machines that may contain multiple computers, dozens of sensors, hydraulic pumps, multiple motors and connections to a network. NorComp is meeting the need for reduced size, weight, and power consumption, as well as supplying the demand for increased connector throughput.

Our connector solutions address power requirements from 30 to 40 amps, as well as low level signaling and high speed ethernet data transmission.



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Application Highlight

A heavy lift drone manufacturer based out of Norway has designed in NorComp's 822K series QUIK-LOQ connectors for quick connect battery charging in severe climates. These drones are capable of carrying weights up to 150kg, and require a quick recharge after every flight mission.





Application Highlight

One of the worlds largest global online retailers utilizes NorComp's 9W4 and 13W3 connectors to provide motor & actuator power, along with signal & data connections to operate their last mile delivery robots. They operate in areas where both physical and environmental hazards exist so a very rugged solution was required.







SENSORS

Power Connections VULCON Circulars QUIK-LOQ Connectors

Signal / Data Connections VULCON Circulars MICRO-D Connectors M-Series D-Subs SEAL-D Connectors

COMMUNICATIONS

Power Connections VULCON Circular

Signal / POE / RF Data Connections

> COMBO-D Co-Ax VULCON Circulars M-Series D-Subs MICRO-D Connectors

BATTERY CONNECTIONS

External Power Connections Power QUIK-LOQ

Internal Power Connections COMBO-D D-Sub

Signal / Data Connections VULCON Circulars M-Series D-Subs SEAL-D D-Subs

Application Highlight

The largest supplier of autonomous floor care & cleaning robots is using NorComp's VULCON M12 cable assemblies in four different configuraions - 4 pin A-code & D-Code along with 5 pin and 8 pin A-Code. These pre-made assemblies are routed throughout the robot for ethernet data, CAN Bus signaling, and sensor power / data.





A major Britsh grocery distributor has designed in several NorComp solutons for their warehouse automations. In addition to our SEAL-D series they are also using our Micro-D series connectors (15 & 25) for 6 & 9 axis Internal Measurement Units (IMU's). Their new design will incorporate our latest 580/581 series full screw machine solution.





DRIVE MOTORS & ACTUATORS

Power (PoL) Connections VULCON Circular

Signal / Data Connections VULCON Circulars M-Series D-Subs SEAL-D D-Subs

Control Board SEAL-D Board Mount Connectors

COMPUTER CONTROLLERS

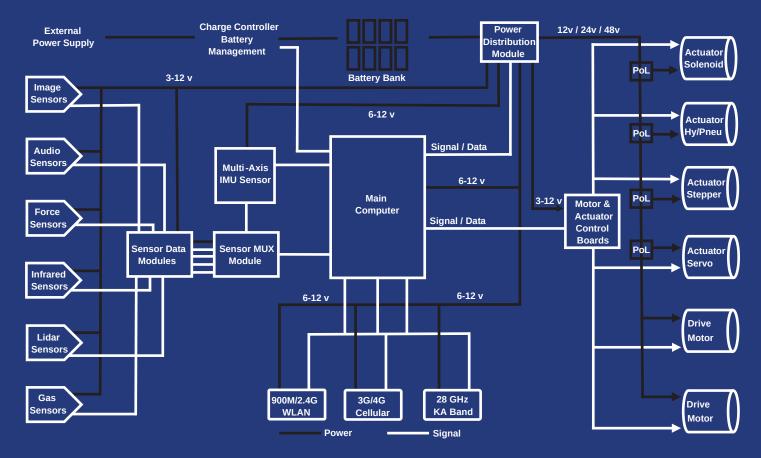
Most boards are designed to suit a customer's specific design purposes. The key commonality is that they will all need to get signal, data & power through their protective housings, to the correct recipient, and then back again to the controller.

NorComp has 6 different product lines to offer for these applications.

VULCON M12, VULCON M8, QUIK-LOQ POWER Connectors, MICRO-D Connectors, SEAL-D Connectors, COMBO-D Power Connectors







Block Diagram Figure: Robotic Interconnect Application Opportunities

No singular robot includes all of the elements charted here.

To showcase our connector capabilties we have identified many of the connection opportunities, and product potential that lie within any robot design.

- The power source (chargers & batteries).
- The drive motors and actuators that perform the robot's function(s).
- The sensors & multiplexers that analyze & report on the robot's environment.
- The radios that communicate status, instructions, results, etc.
- The main board that controls all of the above.

