

ROBOTICS, ROBOT CELLS AND MOBILE ROBOTS

Power it. Control it. Prove it.

The electrical line for the robot cell and the robot that moves: the connection the cell leaves the shop with, the power that feeds the controller and the cart, the station for the person who tends it, and the data your customer's system polls. The manufacturers Dynamic Measurement and Control Solutions represents, organized the way you design, with an application engineer on the phone before the spec locks.

Power it

Energy in, converted, moved. And the switching and protection that keeps it safe.



WALTHER

The cell splits here

Procon rectangular connectors carry power and control through one hood, so the cell, the infeed and the tooling ship as sections. On the customer's floor you **mate the inserts, snap the hood and energize**. Inserts for power, signal and Ethernet in one frame; washdown versions to IP68 for the cell that gets sprayed. Built in Somerset, New Jersey.



WALTHER

Connect, disconnect, lock out: one part

The receptacle and the switch are one unit on the frame: the circuit **cannot be made or broken under load**, and the handle takes a lock. The disconnect ships with the machine, IP67 where the water hits. Series II pin and sleeve, 20 to 100 A at 125 to 480 V, UL Listed and CSA Certified together.



PREMIUM PSU

Control power for the cell and the cart

For the cell, a control-voltage supply with the battery charger and the changeover built in and **Ethernet reporting to the controller**, so a mains dip is a logged event, not a robot fault to recover. For the cart, CLS DC/DC converters that take **16.8 to 137.5 V DC** on one part number, so a 24, 36, 48 or 72 V pack feeds the same 24 V bus with 10 ms of hold-up. DIN-rail supplies and the EFC electronic fuse beside them.



SCHALTBAU

The pack disconnect on the mobile robot

C110B 48 V-class contactors from **60 to 250 A** isolate the pack on an AMR or an AGV and clear a DC arc with permanent-magnet blowout, bidirectional, so charge and discharge go through one device. LV charging connectors to 500 A for the dock, and snap-action switches for the limit and the interlock from the same catalog, from a company built on rolling stock.

Control it

Commanded, coordinated. The periphery around the robot, and the station the person tending it uses.



IMO

The periphery, relay to drive

The infeed conveyor, the door, the lift table and the exhaust fan around the robot: iSmart smart relays and XGB PLCs with **license-free programming**. Jaguar drives from compact to heavy frames, contactors and motor circuit breakers beside them, iView HMIs on the door. One platform your customer's maintenance team can support, same-day dispatch from US stock, up to 5-year warranty on electromechanical components.



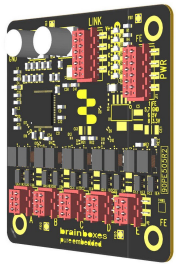
GETT

The tending station, from a quantity of one

InduSmart panel PCs from 10.1 to 21.5 inches, IP65 front, fanless, Windows or Linux, for the station outside the fence. The BlackLine adds **six capacitive keys and an NFC reader below the display**, so operator login and part-program selection are a badge tap, an E-stop in the panel as an option and your logo printed, from a quantity of one, with seven years of form-fit-function availability.

Prove it

Proven, not assumed. The cell ships with a data interface, and the robot controller you qualified is never touched.



BRAINBOXES

Ethernet inside the robot

Board-level switching **55 by 55 by 10 millimeters, rated -40 to +85 C**, designed into the base, the end effector or the cart where a DIN-rail switch will not fit. One OEM built it into a wafer-fab gas delivery controller: 113,000 power cycles, zero failures. Ten-year availability behind the part number.



BRAINBOXES

Cameras and sensors on one cable

PoE gigabit switches on the DIN rail power the vision cameras and sensors from the switch port: **one cable per device**, no AC adapters in the vision cabinet, one fewer supply to qualify. Managed switches with SFP fiber ports carry the cell network across the plant past the distance and EMI copper cannot.



BRAINBOXES

Cell state as a part number

Remote I/O presents run states, cycle counts, gripper and door positions and temperatures as **Modbus TCP devices the customer's own software polls**. The cell ships with a data interface their IT understands, and the robot controller you validated is never touched. Ethernet-to-serial puts the RS-232 or RS-485 instrument in the cell on the same network as a local COM port.



SATEC

Energy per cycle, measured in the panel

A PRO Series instrument in the cell panel: a **Class 0.2S revenue meter and a Class A Edition 3.1 power quality analyzer in one device**. The kWh per part is measured, not modeled, and the sag that faulted the robot at shift change has a time and a depth on file.

Foundation

Looks simple. Fails first. Where the schematic meets the panel.



CONTA-CLIP

The harness through the wall, connectors on

KDS split cable entry: the robot's pre-terminated cables go through the frame with their connectors on, the wave-cut seal closes around each one, and the frame holds IP66. UL Recognized, one frame in place of a row of glands, seals swapped from outside when a cable is replaced.



WISKA

Brace conduit and fittings that seal

The Brace system: plastic conduit with fittings that lock and seal at the enclosure, plus glands including EMC versions and junction boxes, so the drop enters sealed and the shield lands where it should.

A data layer beside the controls

Brainboxes sits outside the control loop and moves information up to MES, historians and dashboards without interfering with machine operation. Anything deterministic, safety rated or inside the loop stays with the controller vendor's I/O.

DC breaks differently than AC

No zero crossing means the contactor has to stretch and cool the arc itself. Ask what a contactor breaks under load, not only what it holds; the two numbers are not the same.

Where we will say no

Anything deterministic, safety rated or inside the robot or motion loop stays with the robot and controller vendor. We do not represent robot arms, servo drives, motion controllers, vision compute, batteries or the safety controller; cable protection is never a robot dress pack. Listings are confirmed on your exact configuration when we quote it.

Talk it through at the design stage

If any part of this card raises a question mid-design, whether that is the connector on the cell, the supply behind the controller, the pack disconnect on the cart or the network in the cabinet, that question is exactly what we are for. A short technical conversation before the spec locks usually surfaces the options a datasheet does not.

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www.dynamicrep.com/robotics-solutions-reliable-power-control-and-data-for-robot-cells

THE MANUFACTURERS ON THIS CARD



WISKA