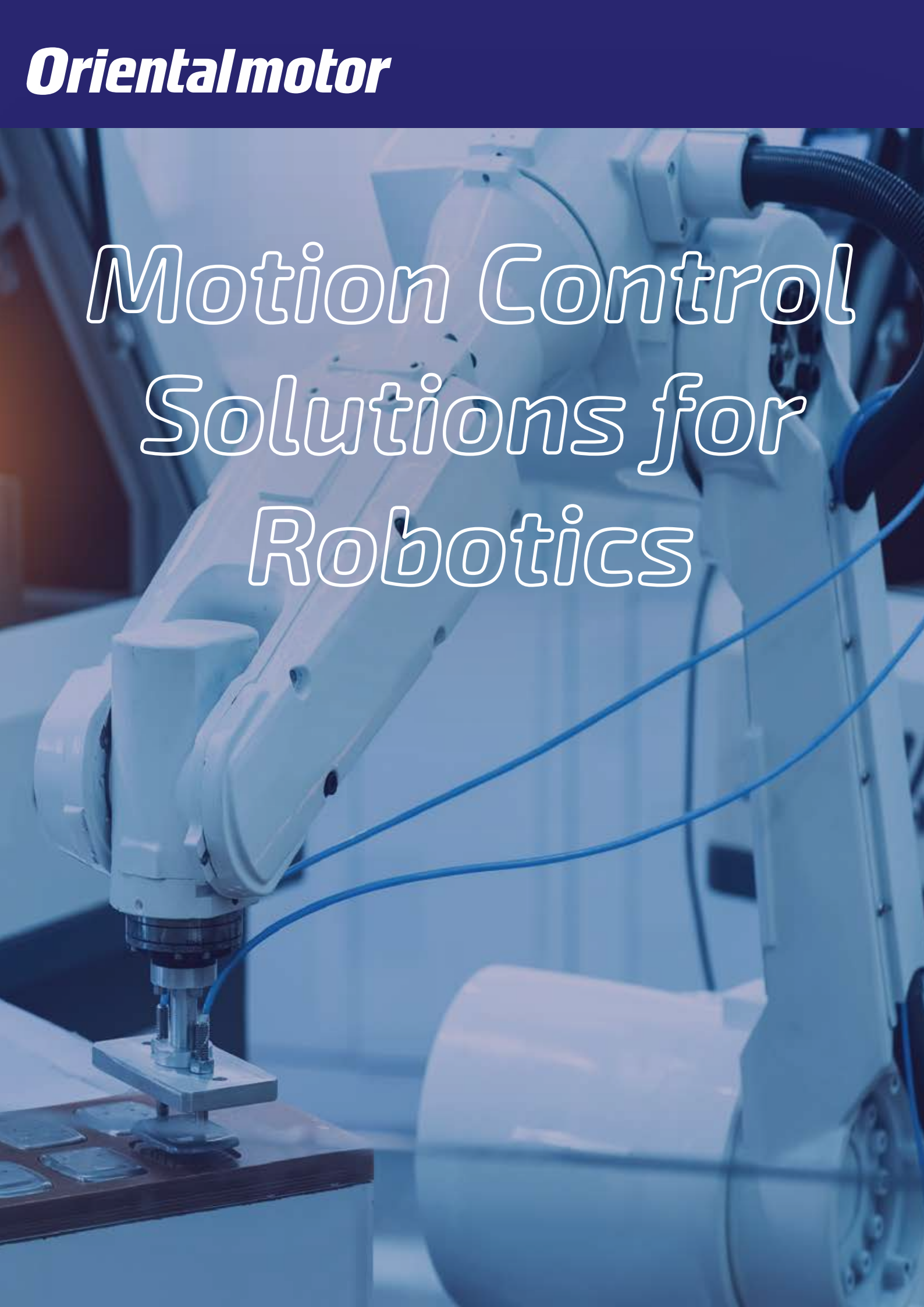


Orientalmotor

Motion Control Solutions for Robotics

A close-up photograph of a white industrial robotic arm in a factory setting. The arm is positioned over a worktable with several small components. Blue cables are connected to the robot. The background is slightly blurred, showing other parts of the industrial environment. The entire image has a blue color overlay.

Motion System Solution

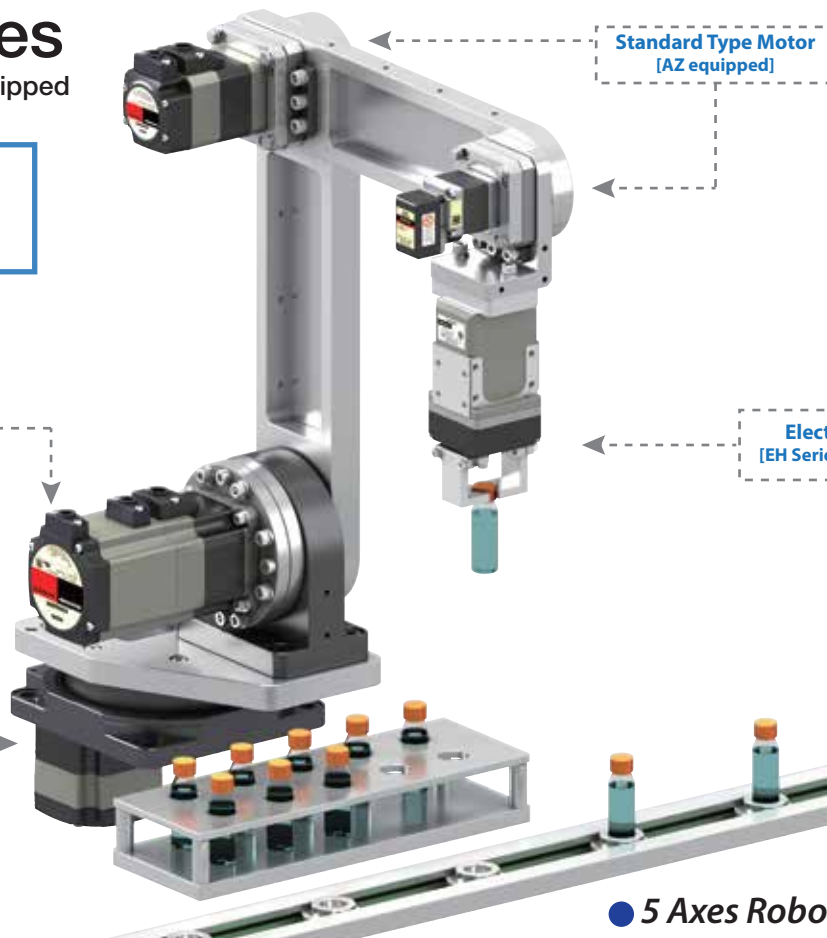
Robot Arm

Highly versatile Modbus (RTU) communication is supported and capable of controlling multiple axes

α STEP AZ Series

Battery-less Absolute Sensor Equipped

Modbus (RTU) Communication



Scan to video

● 5 Axes Robot Arm (Pick & Place)

System Configuration

Products that are applicable with Modbus (RTU) Communication

PLC Serial Communication Module



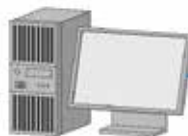
Modbus (RTU)

Touch Screen (Panel Computer)



Modbus (RTU)

PC



Modbus (RTU)

Serial Communication Board

Modbus (RTU) Communication



Scan to Website



Pulse Input Driver with RS-485 Communication
Maximum Connection 31 Axes



α STEP Stepper Motors



Electric Linear Slides



Electric Cylinder



Compact Electric Cylinders



Rack-and-Pinion System



Hollow Rotary Actuators



Electric Gripper

Modbus (RTU) Communication Type

Technical Specifications

Communication Specifications

AZ Series Pulse Input with RS485 Communication Type Drivers Specifications



Pulse Input RS485 Driver (DC)
AZD-KX



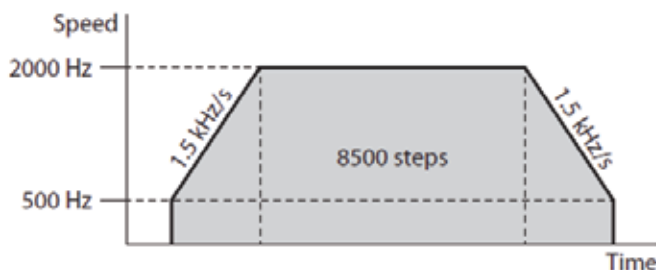
Pulse Input RS485 Driver (AC)
AZD-CX

Protocol	Modbus RTU mode
Electrical characteristics	EIA-485 compliant, Straight cable Twisted pair wire (TIA / EIA-568B CAT5e or higher recommended) is used, and the total extension distance is up to 50m. *
Communication mode	Half-duplex communication and start-stop synchronization (data: 8 bits, stop bit: 1 bit / 2 bits, Parity: none / even / odd)
Baud Rate	Select from 9600bps / 19200bps / 38400bps / 57600bps / 115200bps / 230400bps
Connection Type	Up to 31 units can be connected to one programmable controller (master device).

Query Example

Step by step guidance for complete positioning operation via Modbus RTU control are available in the Operating Manual

As an example, here is a description how to execute the following positioning operation.



1. Send the following five queries and set the operation data.

Communication data (Hex)	Description
01 10 18 00 00 02 04 00 00 00 02 D8 6E	Operation data No.0 operation type=2: Incremental positioning (based on command position)
01 10 18 02 00 02 04 00 00 21 34 C1 F1	Operation data No.0 position=8500 steps
01 10 18 04 00 02 04 00 00 07 D0 5B F0	Operation data No.0 speed=2000 Hz
01 10 18 06 00 02 04 00 00 05 DC DB 4C	Operation data No.0 starting/changing speed rate=1.5 kHz/s
01 10 18 08 00 02 04 00 00 05 DC 5A C0	Operation data No.0 stopping deceleration=1.5 kHz/s

Please contact us for sample programs

We provide a full range of services to assist our customers, from consideration of a purchase through to aftersales service.



Customer Support Centre

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