

The Smartest Controls Should be Easy to Operate

The Roll-2-Roll Controller is the brain of the Web Position Sensors and the Web Guiding Systems. The controller can be used for standalone sensing/measurement applications as well as for closed-loop control applications, with an appropriate actuator. Once the sensor(s) capture the raw images, Roll-2-Roll Controllers process the information and send appropriate measurement or feedback to the actuator. The controller also processes all the operator interface interaction as well as the interaction with external controllers through the industrial Ethernet communication options. The controller is used with both the Web Position Sensors and Web Guiding Systems providing a variety of options as shown in the table on the following page.



GENERAL SPECIFICATIONS

Operator Interface	Optional color touchscreen	Output (Voltage)	± 10 V or 0 to 10 V
Languages	Language independent	Output (Current)	0 to 20 mA or 0 to 10 mA
Motor Driver	Microstepping or servo drive	Connectivity	Ethernet/IP, PROFINET, EtherCAT
Motor	Servo or Linear hybrid stepper	Input Supply	24 V DC
Controller Frequency	50 to 700 Hz	Current	Less than 5 amps

BENEFITS

- **Increase productivity** with no setup and calibration after product changeover
- **Save time** with plug-and-play operation
- **Reduce waste** with high accuracy and high precision measurement
- **Reduce downtime** with increased sensor reliability
- **Save money** with an inexpensive alternative to vision systems
- **Save money** with a single solution for multiple sensing and guiding applications

To order (direct from factory):

By phone: **+1-888-290-3215 ext 01**

By e-mail: **sales@r2r.tech**

Online: **<https://r2r.tech/request-quotation>**

Your local contact is:

CONTROLLER OPTIONS

Following table shows the capabilities of the different controller option

Options	SCU5 D	SCU5 C(x ⁴)D	SCU5 MD	SCU5 MC(x ⁴)D
Input	24 VDC	24 VDC	24 VDC	24 VDC
Application	Sensing + Monitoring	Sensing + Monitoring	Web Guiding	Web Guiding + Sensing + Monitoring
Operator Interface	YES	YES	YES	YES
Analog output	YES	YES	NO	NO
Voltage output	± 10 V ²	± 10 V ²	NO	NO
Current output	0 to 20 mA ³	0 to 20 mA ³	NO	NO
Current Consumption	< 3 Amps	< 2.5 Amps	< 5 Amps	< 5 Amps
Controller Frequency	50 - 700 Hz	50 - 200 Hz	50 Hz	50 Hz
Industrial Ethernet		YES		YES
Web browser dashboard		YES		YES
Remote Control		YES		YES
Diagnostics/Fault Info		YES		YES
Process two sensors	YES	YES	YES	YES
Digital I/O	YES ¹	YES ¹	NO	NO
Standalone System	YES	YES ⁵	YES	YES ⁵

¹ not a standard option but available upon request

² can be programmed to be ± 10 V or 0 to 10 V or ± 5 V or 0 to 5 V based on application requirement

³ can be programmed to be 0 to 20 mA or 4 to 24 mA or 0 to 10 mA based on application requirement

⁴ the industrial ethernet has two options C(E) for Ethernet/IP, C(P) for PROFINET and C(EC) for EtherCAT

⁵ can be made standalone when not connected to a remote controller (PLC) or when set by remote controller (PLC)



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