Roll-2-Roll Technologies

PRODUCT BROCHURE

SCU5



The Smartest Controls Should be Easy to Operate

Key Features

- **Touchscreen operator interface** – icon-based, language-independent for worldwide use
- **Processes two sensors** – single controller handles dual sensor inputs
- **Multiple configurations** – sensing/monitoring (D), web guiding (MD), with Ethernet options (Cx)
- **Industrial Ethernet options** – EtherNet/IP, PROFINET, EtherCAT (on C models)
- **Analog outputs** – ±10V, 0-10V, 0-20mA, 4-20mA programmable
- **Plug-and-play operation** – simple menus for quick setup without specialized training

Benefits

- **Stop losing hours** to complex sensor setup and programming
- **Eliminate training costs** – icon-based interface needs no language translation
- **End integration headaches** – native industrial Ethernet protocols connect directly to your PLC
- **Remove troubleshooting delays** – web browser dashboard for remote diagnostics (C models)
- **Prevent maintenance surprises** – real-time sensor health monitoring
- **Stop paying for multiple controllers** – one controller processes two sensors

Specifications

Feature	SCU5 D	SCU5 C(x)D	SCU5 MD	SCU5 MC(x)D
Application	Sensing + Monitoring	Sensing + Monitoring	Web Guiding	Web Guiding + Sensing
Input Voltage	24 VDC	24 VDC	24 VDC	24 VDC
Operator Interface	Yes (touchscreen)	Yes (touchscreen)	Yes (touchscreen)	Yes (touchscreen)
Analog Output	±10V / 0-20mA	±10V / 0-20mA	No	No
Industrial Ethernet	No	Yes	No	Yes
Web Browser Dashboard	No	Yes	No	Yes
Remote Control	No	Yes	No	Yes
Controller Frequency	50-700 Hz	50-200 Hz	50 Hz	50 Hz
Process Two Sensors	Yes	Yes	Yes	Yes

Industrial Ethernet Options (C models): C(E) = EtherNet/IP, C(P) = PROFINET, C(EC) = EtherCAT

Applications

- Edge position sensing and monitoring
- Web guiding control for converting lines
- Width measurement applications
- Integration with plant PLC/SCADA systems
- Multi-sensor processing for complex lines

Compatibility

SUPPORTED LINE SPEEDS

100-500 fpm

SUPPORTED MATERIAL TYPES

Mesh/Screen, Nonwoven

SUPPORTED WEB WIDTHS

Wide (48"-72"), Medium (12"-48")

Available Configurations

Part Number	Configuration
4-100111	SCU5 MC(E)D
4-100121	SCU5 MD
4-100211	SCU5 C(E)D
4-100221	SCU5 D+
4-100241	SCU5 C(E)D+
4-100251	SCU5 C(E)DIO
4-101111	SCU5 MC(P)D
4-101211	SCU5 C(P)D
4-101241	SCU5 C(P)D+
4-101251	SCU5 C(P)DIO
4-102111	SCU5 MC(M)D
4-102211	SCU5 C(M)D
4-102241	SCU5 C(M)D+
4-102251	SCU5 C(M)DIO
4-105121	SCU5 MDIO
4-106111	SCU5 MC(EC)D
4-106211	SCU5 C(EC)D
4-106241	SCU5 C(EC)D+
4-106251	SCU5 C(EC)DIO
4-107111	SCU5 MC(CL)D
4-107211	SCU5 C(CL)D
4-107241	SCU5 C(CL)D+
4-107251	SCU5 C(CL)DIO

Supporting Documentation

Manuals (20)

- ARIS SCU5 EtherNet/IP Configuration Manual
- Remote Touch Screen Operator Interface (RTI) User Manual
- SCU5 DD Opto-Isolated Output Documentation
- SCU5 M: Web Guide Controller Product and User Manual (V2.6)
- SCU5 MDIO: Digitial Input and Output Documentation
- SCU5 xC(x)D Register Map for v3.5
- SCU5 xC(x)D Register Map for v3.6
- SCU5 xC(x)D Register Map for v3.6d
- SCU5 xC(x)D Register Map for v3.6g
- SCU5 xC(x)D Register Map for v3.6i
- SCU5: Sensor and Web Guide Controller User Manual v3.3
- SCU5: Sensor and Web Guide Controller User Manual v3.4
- SCU5: Sensor and Web Guide Controller User Manual v3.6
- SCU5: Sensor and Web Guide Controller User Manual v3.6d+
- SCU5: Sensor and Web Guide Controller User Manual v3.6n+
- Standard Operating Procedure (SOP): Center Guiding Application (v2.x)
- Standard Operating Procedure (SOP): Edge Guiding Application (v2.x)
- Standard Operating Procedure (SOP): Edge Guiding Application (v3.x)
- Standard Operating Procedure (SOP): Line Guiding Application
- Standard Operating Procedure - Center Guiding Application (v3.x)

2D Drawings (7)

- 24 V DC Input Power Cable 2D Drawing
- Motor Controller - MC QD 1180/1181/1211/1230/1231/1260: 2D Drawing
- SCU5 Controller: 2D Drawing (DXF)
- SCU5 Controller: 2D Drawing (pdf)
- SCU6x: 2D Drawing (pdf)
- SCU6x: 2D Drawing SCUx Connectors (dxf)
- Servo Center Sensor - 2D Drawing

3D Models (1)

- SCU5

Wiring Diagrams (18)

- RTI + SCU5 C(E)D Wiring with 2x ODC for Web Width Measurement
- RTI + SCU5 C(E)D Wiring with 2x ODC for Web Width Measurement with Stacklight
- RTI + SCU5 MC(E)D Wiring with MC QD 1140/1141/1240 with Retrofit Actuator
- SCU5 C(x)D Wiring with ODC (Industrial Ethernet)
- SCU5 C(x)D Wiring with WPS Sensor (Industrial Ethernet)
- SCU5 D Wiring with ODC (Analog Output)
- SCU5 D Wiring with WPS Sensor (Analog Output)
- SCU5 DD Wiring with ODC (Digital Output)
- SCU5 DD Wiring with WPS Sensor (Digital Output)
- SCU5 DI Wiring with ODC (Digital Input and Output)
- SCU5 DI Wiring with WPS Sensor (Digital Input and Output)
- SCU5 MC(x)D Wiring with MC QD 1141/1140/1240 + Web Guide Actuator
- SCU5 MD Wiring with MC QD 1141/1140/1240 + Web Guide Actuator
- SCU5 MD Wiring with MC QD 1180/1181/1211/1230/1231/1260 + Large Upgrade Actuator
- SCU5 MD Wiring with MC QD 1180/1181/1211/1230/1231/1260 + Regen Clamp + Unwind/Rewind Actuator
- SCU5 MD Wiring with MC QD 1180/1181/1211/1230/1231/1260 + Web Guide Actuator
- SCU5 MD Wiring with ODC Family, MC QD 1140/1141/1240 with Web Guide
- SCU5 MDIO Wiring with MC QD 1141/1140/1240 + Web Guide Actuator

Support Files (10)

- EtherCAT ECS File for SCU5 firmware Version 3.5+ using Hilscher Module
- EtherNet/IP EDS File for SCU5 firmware Version 3.5+ using Hilscher Module
- EtherNet/IP EDS File for SCU5 firmware Version 3.5+ using HMS Module
- PROFINET GSDML File for SCU5 firmware Version 3.5+ using Hilscher Module
- PROFINET GSDML File for SCU5 firmware Version 3.5+ using HMS Module
- Rockwell/AB Add-on Instructions for SCU5 C(E)D/MC(E)D controller v3.5d
- Rockwell/AB Add-on Instructions for SCU5 C(E)D/MC(E)D controller v3.6c
- Rockwell/AB Add-on Instructions for SCU5 C(E)D/MC(E)D controller v3.6g
- Rockwell/AB Add-on Instructions for SCU5 C(E)D/MC(E)D controller v3.6i
- Rockwell/AB Add-on Instructions for SCU5 C(E)D/MC(E)D controller v3.6l

Scan for datasheets, 3D models & full documentation
https://r2r.tech/products/controller/scu5

Ready to Get Started?

Contact our experts to discuss how this product fits your application.

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