

# STP-MTRD-23065R Cut Sheet



SureStep DC integrated stepper motor/drive, advanced microstepping, NEMA 23 frame, IP20, 5A, 12-70 VDC, bipolar, 210 oz-in holding torque, 1.8-degree step angle, 200 to 51200 steps per revolution, (1) RS-485 (4-pin) port(s).

For complete product information, please see this item on our store at the following link:



<https://www.automationdirect.com/pn/STP-MTRD-23065R>

## Technical Specifications

<b>Brand</b>	SureStep
<b>Item</b>	Integrated stepper motor/drive
<b>Voltage Type</b>	DC
<b>Controller Type</b>	Advanced microstepping
<b>Amperage Rating</b>	5A
<b>Number of Output Phases</b>	2
<b>Voltage Rating</b>	12-70 VDC
<b>Winding Type Control</b>	Bipolar
<b>Output Type</b>	MOSFET, dual H-bridge and 4-quadrant output
<b>Current Control</b>	4-state PWM at 20 kHz
<b>Step Angle</b>	1.8-degree
<b>Steps per Revolution</b>	200 to 51200
<b>Communication Port and Connection Type(s)</b>	(1) RS-485 (4-pin)
<b>Port Protocol(s)</b>	<ul style="list-style-type: none"><li>• SCL</li><li>• ASCII</li></ul>
<b>Port Speed(s)</b>	up to 115.2k baud
<b>Temperature Rating</b>	0 to 40 deg C
<b>Enclosure Type</b>	Enclosed
<b>Integrated Brake</b>	No
<b>Motor Frame</b>	NEMA 23
<b>IP Rating</b>	IP20
<b>Shaft Type</b>	Single
<b>Shaft Diameter</b>	1/4in
<b>Holding Torque Rating</b>	210 oz-in
<b>Control Mode</b>	Velocity and position
<b>Command Signal(s)</b>	<ul style="list-style-type: none"><li>• step and direction</li><li>• CW/CCW</li><li>• A/B Quad</li><li>• internal indexing (via communication port)</li><li>• velocity (via analog input)</li></ul>
<b>Number of Discrete Input Points</b>	3
<b>Nominal Input Voltage</b>	5-24 VDC

<b>Discrete Input Type</b>	Sinking/sourcing
<b>Number of Discrete Output Points</b>	1
<b>Nominal Output Voltage</b>	5-24 VDC
<b>Discrete Output Type</b>	Sinking/sourcing
<b>Number of Analog Input Points</b>	1
<b>Analog Input Signal Type</b>	Voltage
<b>Input Voltage Signal Range</b>	0-5 VDC
<b>Tuning Mode</b>	Pre-tuned
<b>Idle Current Reduction</b>	Yes
<b>Drive Features</b>	Self-test, anti-resonance (electronic damping), torque ripple smoothing and command signal filtering
<b>Protection Type(s)</b>	<ul style="list-style-type: none"><li>• overvoltage</li><li>• undervoltage</li><li>• overcurrent</li><li>• over-temperature</li></ul>
<b>Configuration</b>	Software
<b>Software Required</b>	SM-PRO configuration software
<b>Requires</b>	STP-485DB9-CBL-2 communication cable and STP-USB485-4W PC adapter

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## Agency Approvals

<b>UL Listed File #</b>	None
<b>UL Recognized File #</b>	None
<b>UL Hazardous File #</b>	None
<b>CE</b>	<a href="#">View CE declarations</a>
<b>CSA File #</b>	None
<b>RoHS Status</b>	Yes (See CE Doc)
<b>EU REACH</b>	<a href="#">View EU REACH document</a>