



World's First Safety AMR Controller

SRC-3000FS



Functional Safety

Attain functional safety levels of PL d and SIL 2. Compliant with an array of stringent standards, including ISO 13849, IEC 61508, and IEC 62061.



Rich Interfaces

Rich I/O (24 DI + 16 DO) interfaces. Two sin/cos security encoder interfaces.



Superb Configuration

High-performance 8-core ARM processor, optimal memory configuration.



Stable Performance

IP rating: IP65
Working temperature: -30°C to 55°C
Storage temperature: -40°C to 70°C



High Integration Degree

Highly integrated construction, more compact, simpler electrical connection, and smaller size.



Functional Safety Design, CE and UL Certified

The world's first AMR controller certified for functional safety by the rigorous standards of ISO 13849-1. Boasting an array of certifications, including CE-EMC, CE-LVD, CE-RED, and the global UL standard ETL certificate.

Parameter Specification

● Standard ○ Optional

Basci parameters

Product name	World's First Safety AMR Controller
Weight	1.5 kg
L x W x H	218 x 140 x 64.8 mm

Functional safety

Safety integrity level	IEC 61508 SIL2 / IEC 62601 SIL2
Safety performance level	ISO 13849-1 Cat.3 PLd

Digital input & output

Power DO	4-Way (single-loaded 24 V / 1 A; 4-Way total load capacity ≤4 A)
DO	12-Way (400 mA)
DI	24-Way (16-Way PNP+8-Way NPN / PNP optional, 7 available for detecting ossd)

Bus interface

CAN	2-Way
RS485	3-Way
Battery communication interfaces	1-Way (CAN / RS485 optional interface)
Sin / Cos encoder interfaces	2-Way

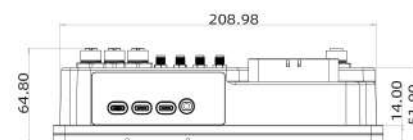
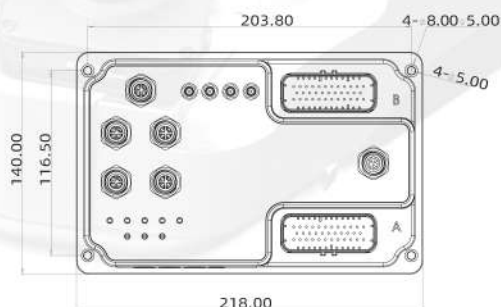
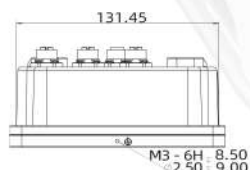
Internet interface

Ethernet	5-Way Gbps (TSN)
Wi-Fi	Wi-Fi 5: Dual-band 2.4G / 5G 802.11ac 2T2R

Other interfaces

USB2.0	1-Way
USB3.0	2-Way
Audio input / output	1-Way / 1-Way

Dimension (mm)



Robot-specific functions

One-button power ON / OFF	1-Way
Battery switch	1-Way
Emergency stop input	1-Way
Emergency stop output	2-Way

Performance parameters

Navigation accuracy	±5 mm, ±1°
Driving speed	≤2 m/s
Map area (single frame)	≤400000 m ²

Function configurations

Basic functions	●
Advanced motion model	○
Advanced recognition function	○
Advanced location function	○
Codesys	-

Working environment parameters

Ambient temperature and humidity range	TEMP: -30°C to 55°C / RH: 10% to 90%, no compression, no condensation
Working voltage	24 V / 50 V
Power consumption	18 W (excluding DO output current)
IP rating	IP52 (IP65 need to customize shell)

Certifications

CE	Conform to EN 61010-1:2010, CE-EMC (IEC 61326-1), CE-RED Standards
ETL	UL 61010-1 UL 61010-2-201 CSA C22.2#61010-1-12 CSA C22.2#61010-2-201
FCC	47CFR Part 15 (2020) ANSI C63.4 (2014)



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