

Vehicle Control

AB-MC-IB-SRC880

ATOMBOTIX



Integrated Localization & Navigation



3D/2D obstacle avoidance; Rack/Code/Pallet recognition algorithm; Overall R&D Cost reduction & Fast development.

Turnkey Software Stack Compatibility



Compatible with main stream component supply chain; Minimum efforts required to design prototype, fast go to market.

Modular & Scalable



Can be reused across robot variants; help OEMs scale product lines without reinventing hardware.

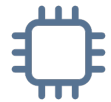
Robust Fusion Localization & Navigation



Supports 2D & 3D SLAM, QR, Reflector, Natural Feature Localization & Navigation.



Handles differential, single steering wheel, mecanum, dual-steering wheel and more drive types; supports multiple mobile robot formfactor.



Supports DI/DO, USB 3.0/USB 2.0, Gigabit Ethernet ports, CAN, RS485, Audio etc; multiple ports for multiple sensors, actuators, and external systems.

Model	AB-MC-IB-SRC880
Positioning Accuracy	± 5 mm / $\pm 1^\circ$
Navigation Methods	2D SLAM, QR code, laser reflector, NFL
Supported Motion Models	Differential drive
Max Travel Speed	≤ 2 m/s
Dimensions (LxWxH)	171 × 118.5 × 38 mm
Net Weight	0.75 kg

DO / DI Interfaces	8 DO / 10 DI
Power DO	2 × 24 V / 1 A
CAN / RS485 Interfaces	2 CAN / 4 RS485
Ethernet Ports	2 Gigabit + 1 Fast Ethernet
Wi-Fi	Dual-band 2.4G / 5G 802.11ac 2T2X (Wi-Fi 6)
USB Ports	2 × USB 2.0
Audio In / Out	1 out
E-stop Input / Output	1 in / 1 out
Battery Switch Output	1 channel
Power Consumption	<12 W (excluding DO output current)
Operating Voltage	24 V
IP Ratings	IP20
Operating Temperature	-30°C - 55°C
Map Area (single map)	≤400,000 m ²
Certifications	CE-EMC, CE-LVD
Advanced Function Support	QR code recognition, Rack recognition

