# OMRON Mobile I/O Box for Autonomous Mobile Robots

## Easily call a mobile robot with the push of a button

The OMRON Mobile I/O Box is an I/O device that can be used to summon an autonomous mobile robot (AMR) to a designated location by just pressing a button. It can also be used as an External Digital I/O for the control of hard-wired devices that are associated with AMR related actions like opening a door for an AMR to pass through or turning on a signal to tell the AMR has arrived.

# **Key features**

- Quick and easy to set up AMR applications in factories and warehouses
- LCD screen displays status of AMR and Mobile I/O Box for ease of operation
- 6 Inputs and 6 Outputs so that one Mobile I/O Box can be used to perform call function and other I/O functions simultaneously.





Connects wirelessly to OMRON Fleet Manager, which determines the best available AMR for your job.



**Open Doors** 

Fleet Manager can signal the Mobile I/O Box to open an automatic door allowing the AMR to pass through.

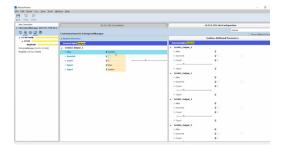




**Activate Automation** 

Turn on a light, trigger an audio signal or activate another external device to help make your operations run even smoother.





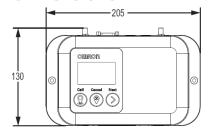
**Configure Quickly and Easily** 

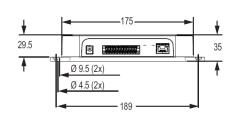
Interface within OMRON Fleet Manager using MobilePlanner allows for quick and easy set up.

# OMRON Mobile I/O Box for Autonomous Mobile Robots

Electrical	
Supply Voltage	12 to 24 VDC
Operating Voltage Range	10.8 to 28.8 VDC (-10% to +20%)
Power Consumption	9 W max.
Isolation	None
Protection	Reverse power, over current (resettable)
Connector	Barrel jack, 5.5 x 2.5 mm (inner pin positive)
I/O	
IN0, IN1 (Internally powered)	ON: 5 mA OFF: 0.5 mA Non-isolated
IN2 IN5 (Externally powered)	ON: 8.8 VDC min./5 mA min. OFF: 1.1 VDC max./0.5 mA max. Isolation 500 V between outputs and system
OUTO OUT5 (Relay SPST-NO)	24 VDC, 2 A resistive load Isolation 500 V between outputs and system Lifetime 100,000 cycles at 2 A max.
Display	
Screen Type	LCD, FSTN negative
Backlight Technology	LED
Backlight Control	Dimmable
Backlight Lifetime	100,000 hours at 25°C
Text Color	White
Resolution	128 x 64 pixels
Effective Display Area	47.99 mm x 27.83 mm

# Mobile I/O Box (PN 23419-802) Dimensions





# Power Supply (PN 23419-812)

A power supply is available for the Mobile I/O Box as a separate OMRON product. It is recommended that the Mobile I/O Box is used with this power supply.



### **Specifications**

Input voltage: 100 - 240 VAC Output voltage: 24 VDC Output current: 500 mA Connector: Barrel jack Cable length: 1.83 m

Adapters: EURO (type C), USA/JPN (type A),

UK (type G), AUS/CHN (type I)

Standards: IEC protection Class II, cULus

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