

MR-100 Drive-by-Wire Mobile Robot Platform

The drive by wire platform from Sensible Machines is a very capable and easy to use vehicle. It has the ability to be driven either manually or under computer control. Its medium payload capacity, high maneuverability and indoor / outdoor capabilities make it useful for a variety of tasks.

The user can control the vehicle either manually or by computer. Computer control is provided by an easy to use



Ethernet interface. Manual control is provided by standard joystick interface. Switching between the two is as easy as flipping a switch.

Specifications

Motor	24V 4-6 pole DC motor.
Suspension	Suspension incorporates casters for enhanced performance over more varied terrain
Speed	Maximum speed of 5 mph (2.2m/s)
Drive Wheels	14" (36 cm) Pneumatic
Ground Clearance	3" (8 cm)
Dimensions	Width 23" (58cm) Length 36.5" (93 cm)
Turning Clearance Circle	20" (51 cm)
Weight Capacity	300 lbs (136 kg)
Weight (Empty)	112 lbs. (51 kg)
Endurance	20 miles (32 km)
Power	24VDC
Drive by Wire Interface	TCP/IP over Ethernet Inputs: Steering curvature control Speed control

Outputs:

- Odometry
- Speed



Machine Awareness

- Curvature
- Health
- Power
- Vehicle Specifications

Manual E-Stop switches plus optional wireless E-Stop

Ordering Information

SMDBWP- (0 0	$0 \overline{0}$	\bigcirc	1	- <u>A</u>
Optional Shelf: 0 – no shelf 1 – with shelf					
Wireless Estop: 0 – no wireless estop 1 – wireless estop					
Encoder Option: 0 – NA 1 – encoder on wheels					

Stephan Roth, President 100 Boundary Street, Pittsburgh, PA 15207 Phone: (412) 398-2694

email: sroth@sensiblemachines.com

Hardware