

# indoor mobile robots

b21r

Magellan Pro

With its low cost, versatility and extensibility, the Magellan Pro is a superb platform for classroom use. Use it to demonstrate your applications and current research at shows, seminars, conferences and even competitions.

*"Its quick response time, dense sensor coverage, and good computing power enabled us to use it for work on both human-computer interaction and exploration & mapping of unknown domains."*

**Dr. Bruce A. Maxwell**  
Swarthmore College



Magellan Pro

Ingenious.  
Portable.  
Affordable.



For the past eight years, iRobot's flagship mobile robot, the mighty B21, has been the platform of choice for roboticists who need a research tool that is uncompromising in its endurance, power, versatility and commanding technological lead.

*"The ability to easily add off-the-shelf hardware components is a big plus, since it allows us to expand the robot easily to meet the changing needs of our research program."*

**Bill Smart**  
Washington University  
in St Louis

B21r

Powerful. Proven. Enduring.

**iRobot™**

# B21r

# Magellan Pro

<b>Sonar:</b>	48 (24 on base, 24 on enclosure)	16 (16 on base)
<b>IR:</b>	24 (24 on enclosure)	16 (16 on base)
<b>Tactiles:</b>	56 (32 on base, 24 on enclosure)	16
<b>CPU:</b>	Up to three Onboard Pentium III™	Onboard Pentium III™
<b>Communications:</b>	Optional Wireless Ethernet	Optional Wireless Ethernet
<b>Batteries:</b>	4 Lead Acid, 1440W-hr total	2Lead Acid, 288W-hr total
<b>Run Time:</b>	6 hours	2 to 3 hours
<b>Ground</b>	2.54cm 1"	3.81cm 1.5"
<b>Clearance:</b>	4 High Torque 24V DC Servo Motors	2 24V DC Servo Motors
<b>Motor:</b>	rFLEX™ Control Architecture	rFLEX™ Control Architecture
<b>Motion Control:</b>	4-Wheel	2-Wheel
<b>Drive:</b>	Synchronous	Differential
<b>Turn Radius:</b>	Zero (turns on center)	Zero (turns on center)
<b>Translate Speed:</b>	1m/s 3.3'/s	1m/s 3.3'/s
<b>Rotate Speed:</b>	160°/s	120°/s
<b>I/O Ports:</b>	Joystick, RS-232, FARNET	Joystick, RS-232, FARNET
<b>Diameter:</b>	52.5cm 21"	40.6cm 16"
<b>Height:</b>	106cm 41.7"	25.4cm 10"
<b>Weight:</b>	122.5kg 270lbs	15.9kg 35lbs
<b>Payload:</b>	90kg 198lbs	9.1kg 20lbs
<b>Body:</b>	Aluminum	Aluminum
<b>Color:</b>	Research Robot Red or Special	Research Robot Red or Special
<b>Safety:</b>	Two Emergency Kill Buttons	One Emergency Kill Button
<b>Software:</b>	Mobility™ Robot Integration Software	Mobility™ Robot Integration Software
<b>Warranty:</b>	One Year Parts and Labor	One Year Parts and Labor
<b>Accessories:</b>	Computer Upgrades Vision Systems Individual Vision Components Wireless Communications Laser Scanners Electronic Compass Text to Speech Interface	Computer Upgrades Vision Systems Individual Vision Components Wireless Communications Laser Scanners Electronic Compass Text to Speech Interface