ATRV-Jrtm MOBILE ROBOT tech sheet

Talent runs in this family! RWI introduces the ATRV's husky little brother, ATRV-Jr $^{\text{TM}}$. This 7/10-scale look-alike offers many of the features and advantages of the larger robot, including four-wheel drive, differential steering, pneumatic 31.75 cm knobby tires, weather-resistant enclosure and RWI's rFLEX $^{\text{TM}}$ control interface.

Smaller, lighter and nimbler, though, the ATRV-JrTM specializes in applications that require it to operate efficiently both indoors and outdoors. Depending on terrain, your ATRV-JrTM will run for three to six hours without a break. And the ease, power and flexibility of RWI's MobilityTM Robot Integration Software lets you put your ATRV-JrTM right to work.

Contat RWI at sales@rwii.com or call 603-532-6900 to configure an ATRV- Jr^{TM} to best fit your needs.



ATRV-JR™ MOBILE ROBOT SPECIFICATIONS

Sonar: 17 (5 front, 10 side and 2 rear facing)
Tactiles: Optional Tactiles on Bumpers
CPU's: Onboard Pentium II 350MHz
Communications: Optional Wireless RS-232 or Ethernet
Batteries: 2 Lead Acid, 672W-hr total

Run Time: 3 to 6 Hours Terrain Dependent

Tires: 31.75cm 12.5" **Ground Clearance:** 9.5cm 3.75"

Motor: 2 High Torque 24V DC Servo Motors
Motion Control: RWI's rFLEXTM Control Architecture

Drive: 4-Wheel Steering: Differential

Turn Radius: Zero (turns on center)

Translate Speed: 1m/s 3.3'/s

Rotate Speed: 120°/s

I/O Ports: Joystick, RS-232, FARnet

 Height:
 55cm 21.6"

 Length:
 77.5cm 30.5"

 Weight:
 50kg 110lbs

 Payload:
 25kg 55.1lbs

Body: Aluminum

Color: RWI Red or Special

Safety: Four Emergency Kill Button

Software: Mobility[™] Robot Integration Software

Warranty: One Year Parts and Labor

REAL WORLD INTERFACE

Robots for the Real World

A Division of IS Robotics, Inc. 32 Fitzgerald Dr. Voice 603.532.69

PO Box 375
Jaffrey, NH 03452



http://www.rwii.com

RWI'S RFLEXTM CONTROL SYSTEM

Built around RWI's revolutionary new rFLEXTM robot control architecture, your ATRV-JrTM guarantees you time-synchronized sensor and encoder readings and provides unprecedented flexibility and responsiveness in robot control. With its FARnetTM logical ring architecture; simple hub-and-node configuration; use of standardized, easily-available components and low network latency, rFLEXTM offers you an unprecedented degree of flexibility, speed and power in the development and modification of robot research projects and applications.

RWI'S MOBILITY™ ROBOT INTEGRATION SOFTWARE

With RWI's Mobility™ robot integration software, there's never a need to scrap or rewrite your robot applications as your research evolves or as you acquire new hardware and new robot platforms. With Mobility's unprecedented level of code re-use, and RWI's dedication to providing full top-to-bottom integration in the robotics software development environment, you'll finally be able to concentrate on your projects and your research, rather than constantly re-writing application code and porting programs to work on new robots.

Accessories for ATRV-JR™

- 1 to 3Mbps Wirless Ethernet Radios
- 56.7kbps Wireless Modems
- · High Gain Antenna
- · High Performance Stereo Vision System
- 3D Vision System
- · Small Stereo Vision System
- Wireless Video System
- · Camera and Frame Grabber Options
- · Computerized Navigation Compass
- Inertial Navigation Sensor
- Absolute Orientation Sensor
- Laser Scanner
- ASCII to Speech Interfaces