

Forager-ARV

Forager Autonomous Robotic Vehicle

FEATURE LISTING

- Omni-chassis
- Locomotion: 6-wheel drive
- "Green" Electric drive system
- 24V, 300Ah battery system
- Multiple Processor control
- Inertial Measurement Unit
- Sensor suite systems
- Plug-in payloads
- Wireless/memory stick reconfigurable primary electronics



Description

Forager-ARV is the smaller Omni-chassis in a family of autonomous robotic vehicles (ARV) from c-Link Systems, Inc. The Omni-chassis creates the ability to build upon a drive unified chassis, different end-usage systems. Some payloads are listed in Table 1. Extended listing can be found in "Potential Payloads for Sovereign ARV Family", TB-1403.

The Forager Omni-chassis contains a locomotion system, a power plant and all the control electronics. The chassis itself is constructed of aircraft aluminum.

Locomotion is achieved through a 6 individually electrical powered wheel drives. Steering is accomplished through the use of the industry standard "skid-steer".

The main power plant is 300Ah – 900Ah battery system with an optional auto-start engine to charge the batteries. Another option is a solar powered recharged station will be available in 2009.

Electronics system comprises of a multi-processor core block which includes all the sensors for autonomous motion, drive locomotion system, guidance system, payload control system/interface and communications. The systems are Altera FPGA based allowing for dynamic reconfiguration of the system functions.

Further information can be found in the "Omni-Chassis Tech Brief", TB-1401.

CLS-SF-TREE	Unit is used to reforest areas or place plants
CLS-SF-ARM4	Unit is a medium duty robotic arm for moving materials
CLS-SF-TENDER	Unit is used as a hauler for materials
CLS-SF BAGGER	Unit is used to fill and stack sand bags
CLS-SF-ADSR	Autonomous Disaster Search & Rescue System

Table 1 Payload Examples

SPECIFICATIONS

Interface:

Zig-Bee communications
Sensor array plug-in
Future Optional fiber optic hard line communications with break-away system

Physical Characteristics:

Overall length – 72inches (182.88cm)
Overall height – 19.5inches (49.53cm) including tracks to the payload mount deck
Overall width – 54inches (137.16cm) including tracks
Gross Vehicle Weight: 1200lbs (544.3kg)

Power Requirements:

Multiple Battery pack tray
Packs are rechargeable for longevity

Environmental Characteristics:

Operating Temperature: -20°C to 90°C
Storage Temperature: -40°C to 105°C
Relative Humidity: 0 to 90% non-Condensing

Model Number:

Forager-ARV: Omni-chassis, no payload

ORDERING INFORMATION

Model Number	Quantity 1-9	Quantity 10+
Forager-ARV	\$19,500USD	Call Factory



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