NASA wishes to 3D print radiation shelters on Mars. Some of the regolith has been identified as suitable for 3D printing. NASA requires a prototype rover system to collect the resource and bring it to the collection area. The range of the system is over a 3m^2 area with an upper bound of 3m in the x and y directions. The rate of resource collection should be a great as possible. The rate of collection will be measured in kg/ 240 sec period. The system should be suitable for transport and operation in the Martian environment. It should consume as little power as possible.