

ALTERNATIVE ENERGY SERIES



MEG-HG1 Hydrogen Generator

The HG1 station is designed to demonstrate how solar energy can be used to produce hydrogen and eventually power a small engine. The system includes the solar photovoltaic panels, battery storage and mobile bench, which houses the battery array. The unit can produce up to 1,600 liters/hour of hydrogen and oxygen. The panel has instruments including a flowmeter, DC ammeters, voltmeter, power input and an emergency shutoff. There is a flow control for the engine as well.

COURSE DESCRIPTION:

The HG-1 program combines many of the sciences into one process where the student gains exposure to physics, chemistry, math, general environmental science, and transportation technology. It demonstrates how it is possible to tap the sun's natural, freely available energy to produce hydrogen fuel and how we can gain our energy independence through education and innovation. The program provides considerable information on energy sources, conversion devices, transmission methods, energy-storage systems, and potentially far-reaching economic and environmental aspects for the world we live in.



Equipment and Parts List:

- Megatomic Hydrogen/Oxygen Generator
- Solar Photovoltaic Panels
- Demand Regulator
- Storage Batteries
- Flashback Arrestor
- Mobile Bench
- 2HP 4-Stroke Engine