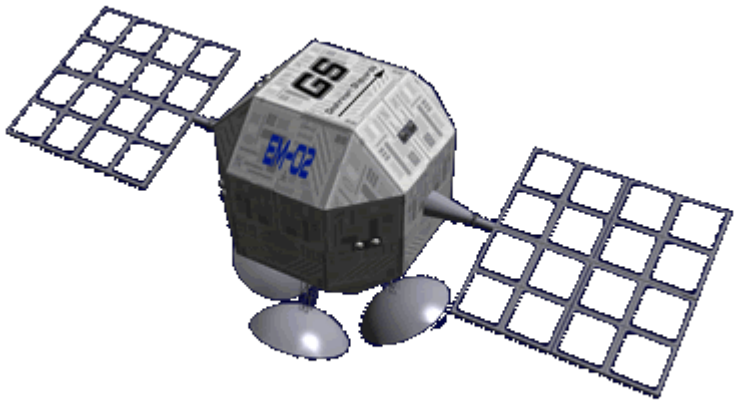
EM-O2 "Houmen" Communication Satellite

The Emrys Industries Houmen *field* communications satellite is intended for use on worlds without an established communications grid, it became available in YE 33.

The EM-O2 is designed to work with the EM-G11 "Explorer" Field Communicator and other communication systems, allowing communications when Line of Sight issues would interfere with the communications. It is intended for temporary or short term installations. A permanent satellite network should use multiple EM-O3 "Hirakeru" Communication Satellites.

The EM-O2 is designed to be placed into an active geosynchronous orbit by a ship approaching the planet. It maintains its position by means of a Geshrinari Graviton Engine, and keeps proper orientation by means of several thrusters installed, and is powered by rechargeable power cells, and charged by two arrays of solar voltaic cells. The EM-O2 operates at a much lower altitude which eliminates signal delay.



Details

Manufacturer: Emrys Industries, Geshrinari Shipyards Nomenclature: EM-O2-1a Type: Communications Class: Satellite Designer: Tamahagane Corporation R&D **Price:** 5,000 KS

Dimensions

Width: 1 meter (3.28 ft) Length: 2.8 meters (9.19 ft) Height: 1.1 meters (3.6 ft)

Performance

- Capable of handling up to 500 different communication signals at the same time.

Systems

EM-O2-E3303 Guidance

The EM-O2 uses a pair of Ge-Z1-E3300 - Guidance System for its Guidance and control, it only requires one, but the second one is a redundant backup for reliability.

EM-O2-E3302 Transponder

The EM-O2 is equipped with four transponders. These are multiplexing communications units, each is able to handle the bandwidth for up to 125 multiplexing signals.

EM-O2-E3301 RADAR

The EM-O2 is equipped with a RADAR for two purposes. To determine its altitude above the surface, and to track any objects approaching it so that Satellite can avoid destructive impacts.

EM-O2-E3300 - Inertial Navigation Unit

The EM-O2 is equipped with the EM-O2-E3300 - Inertial Navigation Unit. It detects any movement in all three axises and provides the data to the control unit for use in correcting.

EM-O2-P3300 Thrusters

The EM-O2 is equipped with eight Geshrinari Maneuvering Thrusters which are used for attitude control to ensure proper alignment of the antennae.

EM-O2-P3301 Graviton Engine

The EM-O2 is equipped with a Geshrinari Graviton Engine to maintain its position above the planet.

EM-O2-G3300 Power System

The EM-O2 is equipped with a bank of high efficiency rechargeable power cells. These are recharged by the two solar arrays located on either side of the satellite.