

EM-O2 "Houmen" Communication Satellite

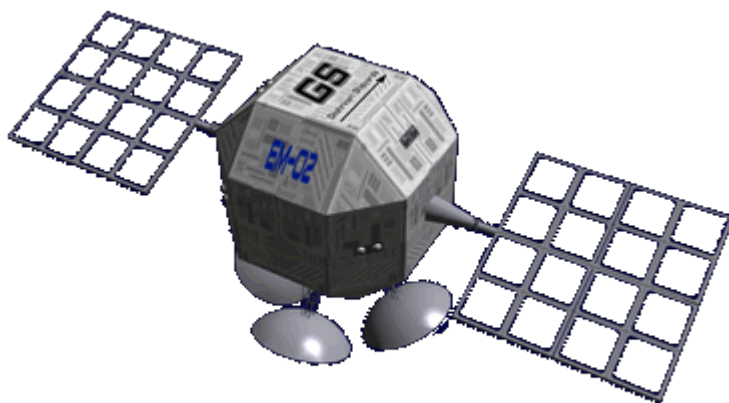
Emrys Industries

A Tamahagane Company

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)

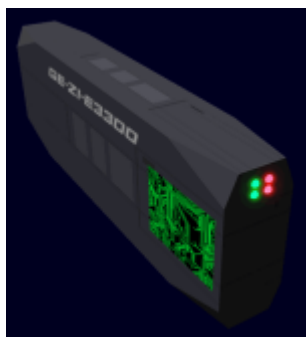
Performance

- 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 axes 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.

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