

GOES HDR Transmitter



DESCRIPTION

The GOES HDR (high-data rate) Transmitter, Model GHT, provides ready access to the GOES Data Collection System (DCS) for GEONICA's data loggers and sensors deployed in environmental data acquisition applications. NOAA/NESDIS' new GOES DCS enables transmission of larger amounts of data and more frequent transmissions.

The GOES HDR Transmitter is easy to program using window-based GHTSet on a PC or a PDA (pocket PC), or via menu-driven commands with any computer's terminal program. The GHT operates as an ASCII modem for use with GEONICA data loggers METEODATA/HYDRODATA-2000/3000C, exporting data packets through a serial port, and in any format designated by the data logger and permitted by NESDIS.

The GOES HDR transmitter is mounted inside the enclosure of the METEODATA/HYDRODATA-2000/3000C data logger as a totally compact remote unit.

In the next page is included an illustration of the METEODATA-2000CP data logger showing all the internal elements, as well as the GOES HDR transmitter allocated in the upper part of the case.

APPLICATIONS

- Stream gauging and reservoir monitoring
- Hydrological and meteorological stations
- Tidal and port systems
- Surface and ground water monitoring
- Agricultural environmental monitoring systems
- Homeland Security information monitoring

FEATURES

- Easy to operate as an ASCII modem
- Serial output in two optional communication protocols:
 - · Continuous listening for data from logger, or
 - Triggering signal to logger for data transfer
- Easy to program using any computer's terminal program
- Operates with GEONICA data loggers METEODATA/HYDRO-DATA-2000/3000C
- GHTSet software program offers verification of GPS and GOES satellite communications

TECHNICAL SPECIFICATIONS

Power Requirements

10.5 to 14.35 VDC, 4.0 mA quiescent, 150 mA during GPS acquisition and 4A during transmission (6.3 watts output for 100 and 300 bps)

User Interface

RS 232 AT-style 9 pin "D" connector

Timekeeping

GPS Discipline within 0.01 seconds GMT

Environmental

-40° to 50° C; 0 to 95% relative humidity, non-condensing

Transmission Format

ASCII and Pseudo Binary

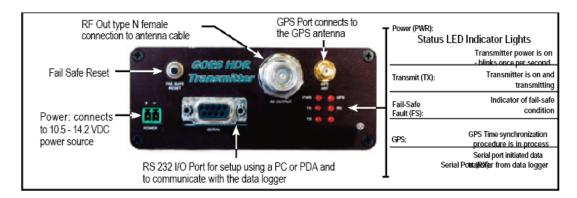
Certified with Antenna: V4TH (+10 dB gain)

Dimensions

125.9 x 175.7 x 63.5 mm



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The GOES HDR Transmitter configuration is stored in non-volatile memory and controls all the operating parameters for data communication, the serial port and the GOES DCS. Internal calibration and self-check variables are available to the controller.

Included are Forward RF power, Reflect RF power, synthesizer operating current, PA power supply levels, frequency loop control voltages, and GPS time synchronization. Simple low-power LED indicators provide a quick confirmation of operations.

DATALOGGER MODEL METEODATA/HYDRODATA-2008CPL ALL ELEMENTS IN A TOTALLY COMPACT MOUNT



