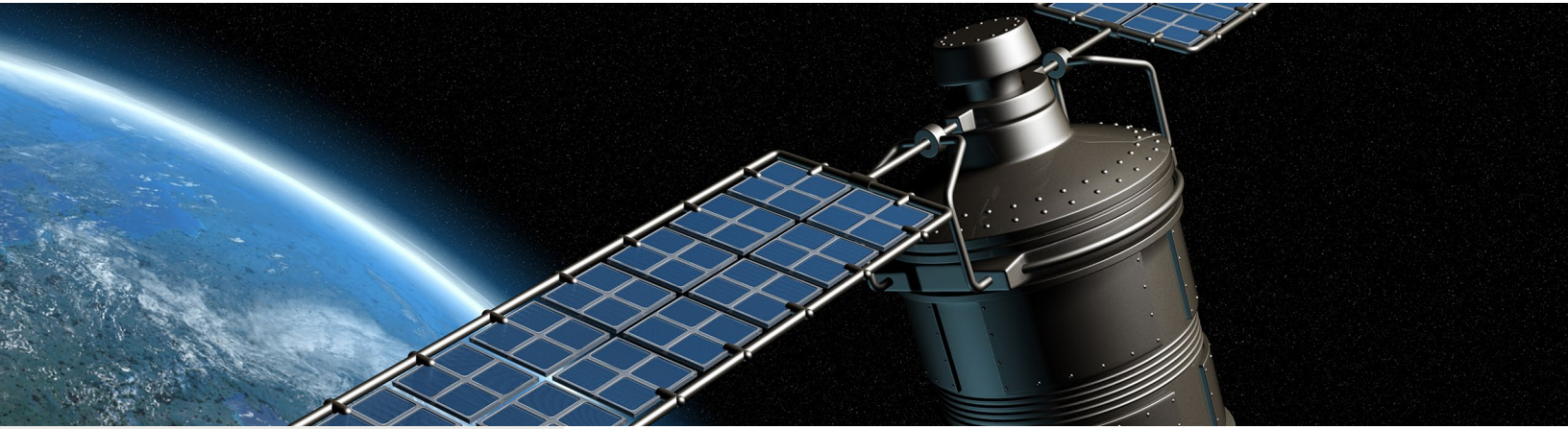


G6-DB



GOES



CS2 GOES Transmitter

FTS, an AEM brand, is a worldwide leader in GOES communications. Our GOES technology is the standard for all new weather stations for the National Interagency Fire Center (NIFC) in the US, and for all new hydrologic stations for the Water Survey of Canada.

Our sixth-generation GOES transmitter is extensively field proven. In fact, FTS GOES technology forms the backbone of the US National Climate Reference Station System.

The G6-DB product can be connected to your data logger providing reliable, free, non-terrestrial based telemetry for qualifying agencies. Combine this with the FTS EON2 omnidirectional antenna and cables for the complete package. FTS also offers high speed GOES data retrieval using our HRIT infrastructure.

- Certified to operate on both North and South American GOES network.
- Extremely accurate timekeeping reliably transmits hourly data for up to 28 days without a GPS fix.
- Extremely low power requirements extend operation in situations of low power or interrupted solar panel charging.
- Automatically calculates antenna azimuth and inclination, speeding installation and eliminating errors.
- Supports test transmissions on an alternate test channel with fixed text messages to ensure future data transmission reliability.
- Easy set-up and installation:
 - Automatic reset and start-up (all configuration data stored in non-volatile memory).
 - Provides diagnostic reports on forward and reflected power for on-site troubleshooting.

Detailed Specifications

POWER SUPPLY

Supply voltage	10.8 to 16.0 VDC
Inverse voltage protection	Yes, schottky diode
Over voltage protection	Yes, >20 VDC, TVS diode Idle < 3 mA Transmitting < 2.6 A
Current draw	GPS on < 50 mA (default setting: once per day for 15 minutes)
Connector	Pluggable terminal block, 5 mm pitch, screw clamp

SATELLITE GENERAL

- Supports timed and random transmissions
- Supports ASCII and binary message transmission

Transmit RF out connector Type N jack

SATELLITE GOES

Satellite GOES Version 2.0 (CS2) – High Transmission Rate – NOAA / NESDIS Certificate

Baud rates 300 and 1200 bps

TRANSMIT POWER (DEFAULT)

300 bps 31.5 dBm

1200 bps 37.5 dBm

Maximum 38 dBm

Frequency range 401.701 to 402.0985 MHz

Initial frequency stability ± 20 Hz disciplined to GPS; After this process, a GPS fix occurs after power up and once per day

CHANNEL BANDWIDTH

300 bps 750 Hz

1200 bps 1.5 kHz

GPS RECEIVER

Type 3.3 V active

Connector SMA jack

CLOCK ACCURACY

Initial accuracy ± 100 μ s synchronized to GPS

Drift ± 10 ms per day without GPS (drift applicable while the transmitter is operating within the temperature operating range)

GPS chronometer One fix at power up (in the first GPS operation) and 1 fix per day afterwards

Transmission continuation 28 days

INTERFACE CONNECTORS

USB Micro USB

RS-232 DB9 F, DCE, RS-232 (3 wire)

RF antenna output Type N jack

GPS SMA jack

Power Removable 2 pins

TEMPERATURE RANGE

Operating -40° to 60°C

Storage -55° to 70 °C

TRANSMITTER SIZE

Maximum footprint including connectors 21.88 x 13.15 x 4.4 cm (8.61" x 5.17" x 1.7")

Weight 955 g

INTERFACE COMMAND PROTOCOLS

Binary command protocol Available on RS-232

ASCII command protocol Available on all ports