Overview

The TX326 is a satellite transmitter that uses the Meteosat satellite system to provide one-way communications from a data collection platform (DCP) to a receiving station. Meteosat is a system of geostationary meteorological satellites operated by EUMETSAT (European Organisation for the Exploitation of Meteorological Satellites). Geostationary satellites have orbits that coincide with the Earth’s rotation, allowing each satellite to remain above a specific region. EUMETSAT is an intergovernmental organization created through an international convention of European countries.

Benefits and Features

- EUROSAT SRDCP and HRDCP certified
- Compatible with Meteosat satellite data collection system
- Easy integration with Campbell Scientific data loggers
- Field tested and proven track record of reliability
- Embedded GPS receiver for stabilized internal time keeping and transmit frequency for long service intervals
- Low standby current consumption for battery-powered systems at remote DCP installation sites
- Quick assessment of radio health via monitoring of diagnostic data from the radio

Technical Description

The TX326 transmitter uses the Meteosat satellite system to provide one-way communications from a data collection platform (DCP) to a receiving station. Supported transmission rates are 100 (SRDCP) and 1200 (HRDCP) bps. This transmitter is used with our CR300, CR310, CR1000X, and CR6 dataloggers, as well as with our GRANITE measurement and control data-acquisition systems.

Because clock accuracy is critically important for Meteosat satellite telemetry, the TX326 includes an embedded GPS receiver. The GPS receiver automatically corrects for clock and oscillator drift, allowing for longer intervals between service visits.

Detailed diagnostic information about the radio is also available for the field technician and various diagnostic uses. These diagnostic parameters include the following:

- Latitude and longitude using the built-in GPS
- Current battery voltage
- Current temperature
- Battery voltage before last transmission
- Temperature before last transmission
- Battery voltage during last transmission
- Altitude of last GPS position

For comprehensive details, visit: www.campbellsci.eu/tx326
### Specifications

**Transmissions Supported**  
- Self-Timed (Scheduled)  
- Alarm (Random)

**Data Format**  
- Meteosat alert message  
- ASCII data with restrictions  
- ASCII data  
- Binary data  
- Pseudo binary (1200 baud only)

**Transmit RF Out Connector**  Type N jack

**Radio Module**  OmniSAT-3

**Operating Temperature Range**  -40° to +55°C

**Storage Temperature Range**  -55° to +75°C

**EUMETSAT DCP Radio Certification (2013-003)**  
- EUMETSAT 2013-003-DCP-SDR (17 July 2013) for standard rate (100 bps)  
- EUMETSAT 2015-001-DCP-HDR (12 March 2015) for high rate (1200 bps)

**Time-of-Day Clock**  Accurate to 20 ms with GPS receiver.

**Case Dimensions**  15.88 x 12.7 x 4.57 cm (6.25 x 5 x 1.8 in.) not including connectors

**Maximum Dimensions**  15.88 x 14.99 x 4.57 cm (6.25 x 5.9 x 1.8 in.) including connectors

**Weight**  0.77 kg (1.7 lb)

### Supply Power

**Supply Voltage Range**  10.5 to 16 Vdc

**Typical Current Drain**  
- < 40 mA during GPS acquisition (typical 25 mA at 12 Vdc)  
- < 2.75 A when transmitting (typical 1.8 A at 12 Vdc) to 4 A maximum  
- < 5 mA standby (typical 2.8 mA at 12 Vdc)

**Connector**  2-pin screw terminal, 0.2 in. pitch

**Power Protection**  Up to 23.1 V (reverse polarity and overvoltage)

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<table>
<thead>
<tr>
<th>Interface Connectors</th>
<th>RS-232</th>
<th>D89 M, DTE, 3-wire RS-232</th>
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</thead>
<tbody>
<tr>
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