Low Power Argos GPS Platform Transmitter Terminal MT305





GENERAL

The MT305 is a low power (typically 0.5W) Argos Platform Transmitter Terminal (PTT). Reduced emitted power increases life-time of data platform when installed in self-powered systems. The GPS (Global Position System) option allows the MT305 to acquire and transmit highly accurate positions anywhere in the world in addition to the standard Argos location service. Built-in controller, serial interface and OEM construction provide high flexibility and cost effective solutions for many applied goals.

PTT PARTS

PTT MT305 is a high-integrated device. It combines the following parts:

- Multifrequency Argos transmitter with temperature compensated crystal oscillator
- GPS engine module (optional)
- Ultra compact GPS antenna (optional)
- DC-DC voltage converter
- High-performance microcontroller
- Application software

HARDWARE FEATURES

- Operation range: -30...+65°C
- Programmable carrier frequency: any frequency in Argos II band (channels S1...S14)
- Voltage range: +7 to +15 VDC
- User's repetition period: 5 s and more (typically 90 s)
- Power: transmit mode power supply < 2.5 VADC;
 sleep mode current supply < 100 μA
- Argos RF power: 0.5±0.1 W (50 Ohm)
- Interface: serial
- GPS type: Trimble Lassen iQ GPS module (tracks as many as 12 GPS satellites)
- GPS power consumption: < 40 mA (acquisition mode)
- Small weight (<100 g without GPS, <150 g with GPS) and compact size ($100 \times 80 \times 20$ mm)

SOFTWARE FEATURES

- Platforms ID: 20 bit or 28 bit
- Output format: DBCP-M2 or any user's format
- Standard repetition period with randomization capability (e.g., 90 ± 9 s)
- Creation the constant (preamble, platform ID, etc.) and variable (sensor data) parts of message
- User's selectable GPS positions updating (e.g. every 30 min, 1 hour, etc.)
- Calculate of checksum and etc.

ADDITIONAL

According to the customer's need the application software can be adapted under custom's task and can be factory installed into MT305. Our experts are always ready to cooperate to you.