

Mobiapps M200

Transceiver

The m200 transceiver provides worldwide satellite data transmit / receive capabilities for satellite-based tracking and industrial remote communications. The m200 operates over the ORBCOMM low-earth orbit satellite network, providing global coverage with no blockage. It can significantly improve asset utilization by allowing clients to monitor, track, and manage their fixed and mobile assets around the world.



Operational Benefits:

The m200 can benefit business operations in multiple ways:

- ☒ Reduced asset downtime
- ☒ Higher field personnel productivity
- ☒ Immediate response to asset fault codes or device alerts
- ☒ Quickly locate lost or stolen assets
- ☒ Identify tampering and misuse of equipment
- ☒ More efficient replacement parts distribution

Mobiapps M200

CHARACTERISTICS

Product Design:

The m200 is designed for reliable operation in the harshest environments; for power-constrained marine, transportation, energy and construction industrial applications. Within its rugged, sealed enclosure include all the functions needed for uninterruptible operation, including programmable processor, real-time clock, extensive power modes, GPS, battery and charger. CAN bus, RS232 serial, digital and analog interfaces enable management and monitoring of most remote or mobile assets. Its pioneering design focuses on low power consumption, simple asset integration and ease of programming, making it the ideal choice for:

- Heavy equipment tracking and monitoring
- Trailer, container and rail car tracking
- Telematics – automotive, trucks and vessels
- Fixed asset monitoring - oil and gas and meter reading

Product Merits:

With the m200's versatility, users can quickly implement solutions that are optimized for their tracking and monitoring applications. Features include:

- Extremely rugged sealed enclosure
- Stainless steel mounting bracket
- Industrial grade J1455 compliance
- CAN bus and RS232 serial interfaces
- Optional programmable LCD display
- Global satellite coverage with no blockage
- 12-channel tightly-integrated GPS
- Broad range of digital and analog I/O
- Internal sealed lead acid battery and charger
- Ample program and nonvolatile memory
- Complete API in C programming language
- Popular Fusion embedded RTOS
- Hibernate mode to protect battery of asset



Distributor for Spain and Portugal:

ORBCOMM

TECNOSEGUR

- > Basauri, 17. Valrealty
- > edif. A, 2º dcha.
- > 28023 Madrid
- > phone: 91 372 97 51
- > tecnosegur@tecnosegur.com

> www.tecnosegur.com

Mobiapps M200

PRODUCT SPECIFICATIONS

- **Interfaces:**

Host Serial Port: RS232, 3-wire (TX, RX, DTR)
CAN bus 2.0B (SAE J1939), using Deutsch DT13-6P sealed connector
Digital I/O: Six (3.3 V), interruptible input or output
Analog Inputs: Four 10-bit (3.3 V)
Conxall 8-pin and 20-pin sealed connectors

- **Satellite Communications:**

TNC female connector, 50 ohm
ORBCOMM Rx: 137 – 138 MHz, 4800 bps
ORBCOMM Tx: 148 – 150.05 MHz, 2400 bps
Minimum Detectable Signal: -120 dBm (typical)
Transmit Power: 5 Watts
ORBCOMM & FCC Approved

- **GPS Receiver:**

SMA female connector, 50 ohm, 3 V Active
Number of Channels: 12
Cold Start: < 52 seconds TTFF (90%)
Horizontal Accuracy: < 11 meters (90%)

- **Power:**

External Input Voltage: 9–32 VDC (SAE J1455)
Rechargeable Battery: 12 V, 2.5 Ah lead acid
ORBCOMM Tx: 1.75 A @ 12 V (pulse current)
ORBCOMM Rx: 100 mA @ 12 V
With frame save mode: 45 mA @ 12 V
Hibernate Mode: < 125 µA at 12 V
GSM Low Power Receive: 1.2 mA @ 12V

- **Cellular Communications:**

SMA Reverse Polarity Pin Jack, 50 ohm
Quad-band GSM850, EGSM900, DCS1800, PCS1900
Low power listen, wake-up on “shoulder tap”, SMS

- **Enclosure:**

Sealed Noryl plastic case (IP 66)
18.5 x 22.1 x 7.6 cm (7.3” x 8.7” x 3.0”)
Stainless steel mounting bracket

- **Environmental:**

Meets or exceeds SAE J1455 specifications in electrical, mechanical and environmental
Operating Temperature: -40°C to +85°C
Relative Humidity: 0% to 95%
Salt Mist: IEC 68-2-52
Vibration: 3 g RMS (30 m/s²) vibration from 25 Hz to 500 Hz for 10 cycles (IEC 68-2-6 Fc)
Shock: half sine acceleration of 30 g (300 m/s²), 18 ms duration (IEC 68-2-27 Ea)
Electrical: SAE J1455 compliance for load dump, jumper start, reverse polarity, battery-less operation, switching transients and ESD.

- **Programming:**

Program / Data Memory (flash): 8 MB
SDRAM: 16 MB
Language: C/C++ on Fusion RTOS
Environment: ADI Visual DSP w/JTAG ICE



Distributor for Spain and Portugal:



TECNOSEGUR

- > Basauri, 17. Valrealty
- > edif. A, 2º dcha.
- > 28023 Madrid
- > phone: 91 372 97 51
- > tecnosegur@tecnosegur.com

> www.tecnosegur.com