

ORIGINAL EQUIPMENT MANUFACTURERS BOARD



Small Eurocard . . . powerful GNSS Performance!

- Dual frequency GPS and GLONASS tracking capability
- Fast satellite signal acquisition and re-acquisition
- 20 satellite, all-in-view, tracking capability
- 20Hz RTK and update rate
- Scalable solution via software option authorization (OAF)

The half euro card format offers the benefits of a smaller form factor and is packed with dual frequency GPS and GLONASS signal measurement capability. Capable of outputting positions accurate to the centimeter level at high update rates, the 112T is the ideal technology for your navigation system integration.



Euro 112T Board Features & Specifications:

Tracking Features

- 20 satellites, all-in-view, L1 GPS, L1/L2 GPS, L1/L2 GLONASS, L1/L2 GPS + L1/L2 GLONASS, WAAS/MSAS/EGNOS.
- Co-Op Tracking (high satellites help low satellites)
- Low signal tracking (down to 30 dBHz)
- Up to 30 g's of dynamic Advanced Multipath Mitigation
- Reacquisition < 1 Second
- Cold start < 60 Seconds
- Warm start < 35 Seconds
- Hot start < 5 Seconds

Data Features

- Up to 20 Hz update rate for real time position and raw data (code and carrier)
- 10 cm code phase and 0.1 mm carrier phase precision
- RTCM SC104 versions 2.1, 2.2 and 3.0 Input/Output
- NMEA 0183 versions 2.1, 2.2, 2.3 and 3.0 Output
- Multiple Base RTCM
- Geoid and Magnetic Variation models
- RAIM
- Different DATUMs support
- Output of grid coordinates
- CMR and CMR+ support

Position Accuracy*

- Dual Frequency:
- Static, Fast Static
 - Horizontal: 3mm + 1ppm x (baseline length)
 - Vertical: 5mm + 1ppm x (baseline length)
 - Kinematic, RTK
 - Horizontal: 10mm + 1.5ppm x (baseline length)
 - Vertical: 20mm + 1.5ppm x (baseline length)

Data Storage

- Up to 128 MB of on-board storage

Input/Output

- Four high speed RS232 serial ports (up to 460.8 Kbps).
- Full-speed USB device port (12 Mbps).
- Two 1PPS outputs (LVTTL) synchronized to GPS, UTC, or GLONASS
- Two Event inputs
- MINTER interface:
- Four external LED drivers
- ON/OFF control input External command input
- Four General Purpose 3.3V CMOS inputs
- Eight General Purpose 3.3V CMOS outputs
- Full-duplex 10BASE-T Ethernet port

Power

- Input supply voltage: 4.75V to 28V
- Power consumption: 2.7W typical; 3.3W max
- On-board back-up battery for timekeeping and almanac data storage: 10 years of operation min

Environmental

- Operating Temp -40°C to +75°C
- Storage Temp -40°C to +75°C

Other

- Antenna output voltage - 5 VDC
- Back up battery - 10 years

Main Connector

DIN41612, 2 row x 32 pin, Right Angle, Male, AMP 536052-5 is used on the board.

Dimensions

112mm

Antenna Connector

MMCX RIGHT ANGLE PCB JACK, / AMPHENOL/908-24100 is used on the board. Central pin supplies 5V (up to 0.08A) for antenna Low Noise Amplifier.

CAN Connector

HEADER, 1X6, MOLEX 53261-0690 is used on the board

* With proper 50 ohm antenna

** For Technical Drawings and additional Technical Specifications go to: www.topconolutions.com.



Euro 112T

Powered by our Paradigm® GPS+ chip, the Euro 112T includes dual frequency GPS and GLONASS tracking capability with up to 20Hz RTK and update rates. Its rugged Eurocard interface and vast array of input/output options provides easy and reliable integration for the most demanding applications.

And with Topcon's exclusive software option authorization capability (OAF), you only pay for the capability you need today...easily upgrade as your requirements change in the future.

Other OEM Boards

TG-3

The economical TG-3 board provides 50 channel GPS+GLONASS single frequency technology with up to 100Hz data and position update capability.

Euro 160T

Standard 160mm Eurocard format delivers GPS L1/L2, and GLONASS tracking and all of Topcon's exclusive and advanced GPS+ features.

G3-160T

Standard 160mm Eurocard format is the world's first to track signals from all three satellite positioning system -- GPS-GLONASS-Galileo. GPS signal tracking includes L2C and L5.



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