

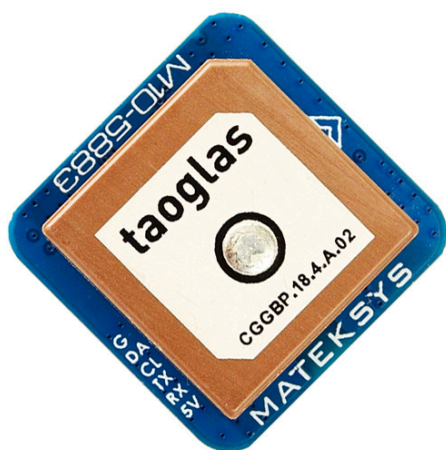
Link do produktu: <https://dronexpert.eu/modul-gps-matek-gnss-compass-m10-5883-p-15384.html>

Moduł GPS Matek GNSS & COMPASS M10-5883



Cena brutto	186,18 zł
Cena netto	151,37 zł
Dostępność	Aktualnie niedostępny
Kod producenta	M10-5883
Producent	MATEKSYS

Opis produktu



MATEKSYS GNSS M10-5883

- * GNSS ublox MAX-M10S
- * Magnetic Compass QMC5883L
- * Patch Antenna 18*18*4mm
- * UART(TX, RX), for GNSS MAX-M10S
- * I2C(DA, CL), QMC5883L
- * JST-GH-6P connector (SM04B-GHS-TB)
- * GNSS PPS LED, Green
- * 23*23*10mm, 9g

- M10-5883 uses multi-constellation GNSS powered by u-blox MAX-M10S.
- MAX-M10S supports concurrent reception of four GNSS (GPS, GLONASS, Galileo, and BeiDou). The high number of visible satellites enables the receiver to select the best signals. This maximizes the position availability, in particular under challenging conditions such as in deep urban canyons. u-blox Super-S (Super-Signal) technology offers great RF sensitivity and can improve the dynamic position accuracy with small antennas or in non-line-of-sight scenarios. For maximum sensitivity in passive antenna designs, the MAX-M10S module integrates an LNA followed by an SAW filter in the RF path.
- More details about the MAX-M10S, pls check out [u-blox MAX-M10S](#) page

Specifications

- GNSS [u-blox MAX-M10S](#) (GPS, GLONASS, Galileo and BeiDou)
- Magnetic Compass QMC5883L
- Patch antenna 18*18*4mm
- Input voltage range: 4~9V (5V pad/pin)
- Power consumption: 13mA
- UART baudrate: 9600 default
- Operating Temperatures: -20~80 °C
- UART(TX, RX) interface for GNSS MAX-M10S
- I2C(DA, CL) interface for Compass QMC5883L

- JST-GH-6P connector (SM06B-GHS-TB)
- GNSS PPS LED, Green. (Solid ON after powering on M10-5883, blinking(1Hz) when GNSS get 3D fix)
- 23mm*23mm*10mm
- 9g
- [M10-5883_step.zip](#)

Includes

- 1x M10-5883
- 1x JST-GH-6P to JST-GH-6P 20cm silicon wire

Wiring and settings

- M10-5883 5V to Flight controller 4~9V
- M10-5883 RX to Flight controller UART_TX
- M10-5883TX to Flight controller UART_RX
- M10-5883 CL to Flight controller I2C_SCL
- M10-5883 DA to Flight controller I2C_SDA
- M10-5883 G to Flight controller GND

Tips and Notes

- **Compass Alignment(Arrow forward and flat mounting): Tilting the magnetometer is strongly discouraged !**
INAV/Betaflight: CW 270° Flip when flight controller arrow is facing forward also.
ArduPilot/Mission Planner: Rotation None.
- Protocol: Ublox 5Hz or NMEA 1Hz

- INAV 5.0.0, Betaflight 4.3.0, ArduPilot 4.1 or newer is required.
- The default configuration on MAX-M10S with ublox FW 5.1 is concurrent reception of GPS, Galileo, and BeiDou B1I with QZSS and SBAS enabled. GLONASS is disabled by default.
- **Beidou B1I (1561.098 MHz) and GLONASS can't be enabled at the same time. Beidou B1C (1575.42 MHz) and GLONASS can be enabled at the same time. Flight controller firmware(INAV, Betaflight, ArduPilot) don't support enable Beidou B1C for now. so MAX-M10S can't receive GLONASS when it works with flight controller(fw INAV, Betaflight, ArduPilot) .**
- with GPS, Galileo, and BeiDou B1I with QZSS and SBAS enabled, MAX-M10s can receive more than 30 Sats with HDOP down to 0.55.
- Start with u-blox GNSS FW3.01, timepulse is aligned with UTC time and that time is set valid only after leap second is downloaded. That could take up to 12.5 min. Probably PPS LED will not blink immediately after GPS has 3D fixed.
- The M10-5883 provides the ability to reset the receiver. Bridging "RST" pad to Ground for at least 100 ms will trigger a cold start. RESET will delete all information and trigger a cold start. It should only be used as a recovery option.

- Make sure to have compass/magnetometer 10cm away from power lines/ESC/motors/iron based material
- The scratches on ceramic antenna are the result of tuning the antenna.
- HD cameras(Gopro, Split, Tarsier, etc) could interfere GPS signal, try turning off HD camera before GPS 3D fix
- There are reports that Frsky X8R could interfere M9N GPS. If you are using X8R and GPS can't get 3D locked. power off X8R then test.
- Troubleshoot GPS related issues: <http://www.mateksys.com/?p=5712#tab-id-6>
- [u-center Windows](#)