Combi-sensor 6 Pin

Art. Nr. 201257

The 9-axis sensor module combines three sensors within two integrated circuits (ICs), the ICM42670 and MMC5603, into a compact device for motion detection and orientation. The sensor can be connected to a controller with the 6-pin extension cable. This provides the necessary 3.3V power supply and also the I²C communication.

ICM42670 (Address: 0x68)

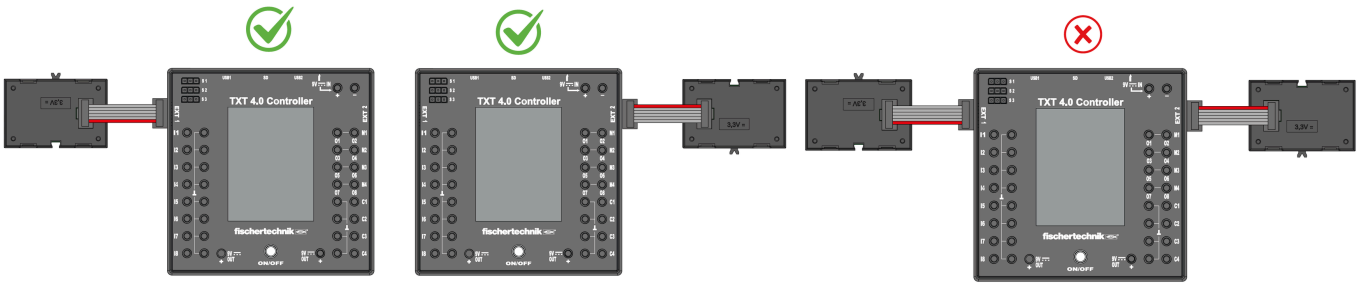
- Gyroscope: Triaxial, 16-bit, with ranges of ±250 to ±2000 degrees per second.
- Accelerometer: Triaxial, 12-bit, with measurement ranges from ±2g to ±16g.

MMC5603 (Address: 0x30)

- Geomagnetic Sensor: 20-bit resolution, measures magnetic fields up to ±300 µT with a resolution of 0.0061 µT, useful for digital compass applications.

PIN assignment

The Combi-sensor can be connected to the EXT1 **or** EXT2 port. Example of connection to the TXT 4.0 Controller. Only one Combi-sensor can be connected to a Single TXT4.0 controller.



The coordinate system of the compass is rotated 270° around the Z+ of the ACC/Gyro system.
Viewpoint: Connector facing the observer, tongue facing down, and slot upwards (Text normal).

X: Right (MAG: Down)
Y: Up (MAG: Right)
Z: Towards the observer
ROT: Rotation direction according to the Right-Hand Rule.