

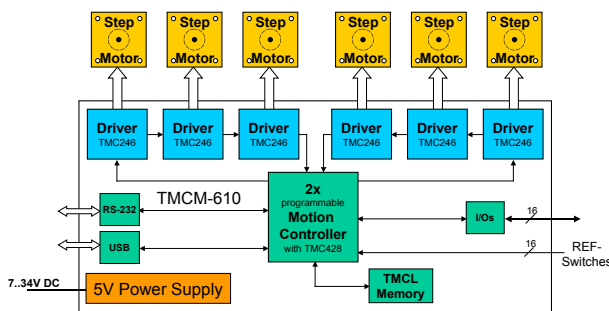
# TMCM-610

**6-Axis  
Controller / Driver  
1.1A / 34V**

**INFO** The TCM-610 is a six axis 2-phase stepper motor controller and driver module. It provides a complete single board motion control solution at low cost. Using the integrated additional I/Os it even can do complete system control applications. The motors and switches can be connected easily with screw terminals. The connection of the multi purpose I/Os can be done via a dual-in-line pin connector. The TCM-610 comes with the PC based software development environment TMCL-IDE. Using predefined TMCL (Trinamic Motion Control Language) high level commands like „move to position“ or „constant rotation“ rapid and fast development of motion control applications is guaranteed. The TCM-610 can be controlled via the USB or RS-232 interface. Communication traffic is kept very low since all time critical operations, e.g. ramp calculation are performed on board. A user TMCL program can be stored in the on board EEPROM for stand-alone operation. The firmware of the module can be updated via the serial interface. With the stallGuard™ feature it is possible to detect overload and stall of the motor.

### MAIN CHARACTERISTICS

- ELECTRICAL DATA**
  - up to 1.1A coil current RMS (1.5A peak)
  - 7V to 34V supply voltage
- SUPPORTED MOTORS**
  - two-phase bipolar motors with 0.3A to 1.1A coil current
- INTERFACE**
  - RS-232 and USB host interface
  - inputs for reference and stop switches
  - general purpose analog and digital I/Os
- FEATURES**
  - up to 16 times microstepping
  - memory for 2048 TMCL commands
  - automatic ramp generation in hardware
  - on the fly alteration of motion parameters (e.g. position, velocity, acceleration)
  - stallGuard™ for sensorless stall detection
  - full step frequencies up to 20kHz
  - dynamic current control
  - TRINAMIC driver technology: no heatsink required
- SOFTWARE**
  - stand-alone operation using TMCL or remote controlled operation
  - PC-based application development software TMCL-IDE included
- OTHER**
  - pluggable / screw terminal connectors
  - RoHS compliant
  - size: 160 x 120 mm



ORDER CODE	DESCRIPTION
TMCM-610/SG	6-axis controller / driver module 1.1A / 34V with stallGuard™