

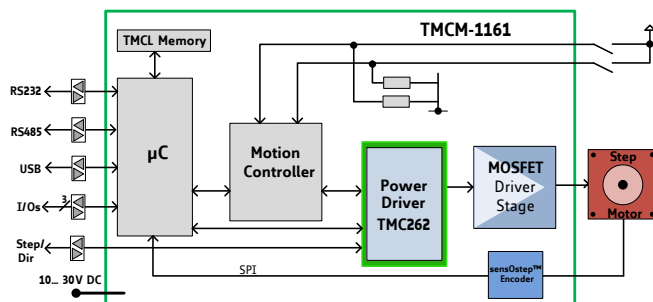
# TMCM-1161

**1-Axis**  
**Motor Mountable**  
**57/60mm | NEMA23/24**  
**Controller / Driver**  
**2.8A / 24V**  
**Serial Interface**

**INFO** The TCMC-1161 is an intelligent stepper motor controller/driver module featuring the new outstanding coolStep™ technology for sensorless load dependent current control. This allows energy efficient motor operation. With the advanced stallGuard2™ feature the load of the motor can be detected with high resolution. The module is designed to be mounted directly on a 57mm or 60mm flange QMot stepper motor. It converts the motor into a compact mechatronic device with serial bus oriented or standalone control. The PC based software development environment TMCL-IDE for the Trinamic Motion Control Language (TMCL™) can be downloaded free of charge from the TRINAMIC website. Predefined high level TMCL commands guarantee a rapid development of motion control applications. Communication traffic is kept very low since all time critical operations, e.g. ramp calculation are performed onboard.

### MAIN CHARACTERISTICS

- ELECTRICAL DATA**
  - 24 V DC (nom.) supply voltage
  - up to 2.8A RMS coil current
- SUPPORTED MOTORS**
  - two-phase bipolar stepper motors
  - mountable on QMot motors (57mm/60mm | NEMA23/24)
- INTERFACE**
  - USB, RS232, RS485
  - step&direction interface
  - inputs for ref. & stop switches
  - general purpose I/Os
- FEATURES**
  - up to 256 times microstepping
  - memory for 2048 TMCL™ commands
  - stallGuard2™ sensorless load detection
  - coolStep™ sensorless load dependent current control
  - microPlyer™ 16 to 256 times microstepping interpolation
  - integrated absolute sensOstep™ encoder with 1024 pps.
  - automatic ramp generation in hardware
  - on the fly alteration of motion parameters
- SOFTWARE**
  - standalone or remote controlled operation
  - PC-based (Windows) application development software TMCL-IDE downloadable
- OTHER**
  - pluggable JST connectors
  - RoHS compliant
  - size: 60 x 60 mm<sup>2</sup>



ORDER CODE	DESCRIPTION
<b>TMCM-1161</b>	1-axis controller / driver module 2.8A / 24V
<b>TMCM-1161-CABLE</b>	Cable loom including all necessary cables (single ended)
<b>Related products:</b>	QMot motors QSH5718 or QSH6018