

TMCM-1160

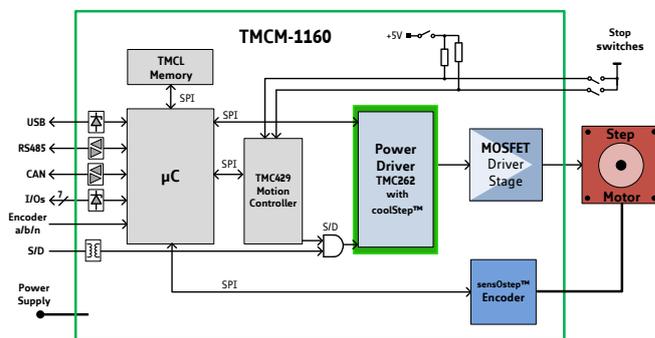
1-Axis
Motor Mountable
57/60mm | NEMA23/24
Controller / Driver
2.8A / 48V
sensOstep™ Encoder
Serial Interface

INFO The **TMCM-1160** 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 57 or 60mm flange stepper motor. It converts the motor into a compact mechatronic device with serial bus oriented or standalone control.

The **TMCM-1160** is equipped with TRINAMICs **sensOstep™** encoder with 1024 pps and offers an a/b/n encoder interface. 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**
 - 9V to 51V DC supply voltage
 - up to 2.8A RMS coil current
- SUPPORTED MOTORS**
 - two-phase bipolar stepper motors
 - mountable on 57/60mm | NEMA23/24 motors
- INTERFACE**
 - RS485, USB and CAN
 - step&direction interface
 - inputs for ref. & stop switches
 - 4 general purpose I/Os
 - incremental a/b/n encoder interface
- 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
 - ready for CANopen
- OTHER**
 - pluggable JST connectors
 - RoHS compliant
 - size: 60 x 60 mm²



ORDER CODE	DESCRIPTION
TMCM-1160	1-axis controller / driver module 2.8A / 48V
<i>Related Products</i>	QMot motors QSH5718 and QSH6018
TMCM-1160-CABLE	Cable loom including all necessary cables (single ended)