

TMCM-1140

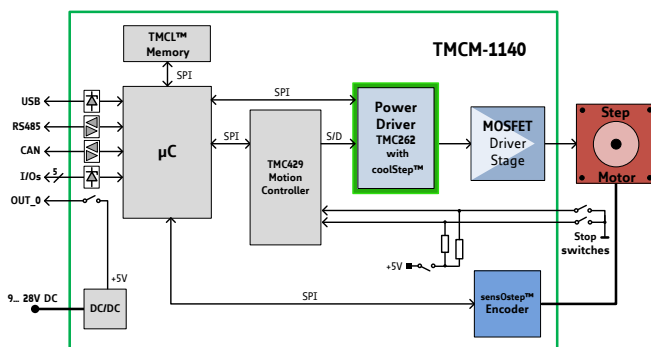
**1-Axis
Motor Mountable
42mm | NEMA17
Controller / Driver
2A / 24V
sensOstep™ Encoder
Serial Interface**

INFO The **TMCM-1140** 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 42mm flange stepper motor. It converts the motor into a compact mechatronic device with serial bus oriented or standalone control. The **TMCM-1140** is equipped with TRINAMICs **sensOstep™** encoder with 1024 pps.

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 28V DC supply voltage
 - up to 2A RMS coil current
- SUPPORTED MOTORS**
 - two-phase bipolar stepper motors
 - mountable on 42mm | NEMA17 motors
- INTERFACE**
 - RS485, USB and CAN
 - 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: 37 x 37 mm²



ORDER CODE	DESCRIPTION
TMCM-1140	1-axis controller / driver module 2A / 24V
TMCM-1140-CABLE	Cable loom including all necessary cables (single ended)