

# TMCM-1141

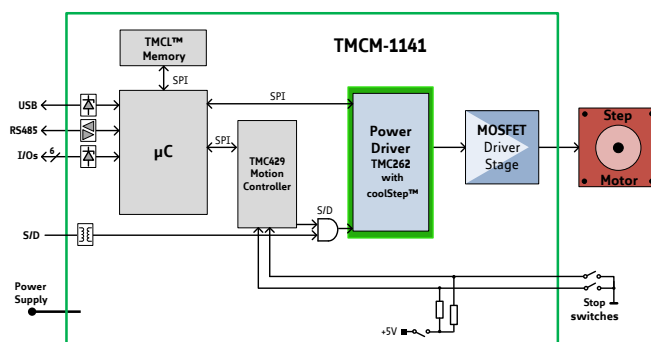
**1-Axis**  
**Motor Mountable**  
**42mm | NEMA17**  
**Controller / Driver**  
**1.1A / 24V**  
**sens0step™ Encoder**  
**Serial Interface**

## MAIN CHARACTERISTICS

**INFO** The **TMCM-1141** 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. T

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

- ELECTRICAL DATA**
    - 9V to 28V DC supply voltage
    - up to 1.1A RMS coil current
  - SUPPORTED MOTORS**
    - two-phase bipolar stepper motors
    - mountable on 42mm | NEMA17 motors
  - INTERFACE**
    - RS485, USB
    - step&direction interface
    - inputs for ref. & stop switches\*
    - 3 general purpose digital inputs\*
    - 1 analog input
    - 2 general purpose outputs
  - 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
    - 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
- \* alternate functions



ORDER CODE	DESCRIPTION
<b>TMCM-1141</b>	1-axis controller / driver module 1.1A / 24V
<b>Related Products</b>	QMot motors QSH4218
<b>TMCM-1141-CABLE</b>	Cable loom including all necessary cables (single ended)

