+

based commutation.

TMCM-1640

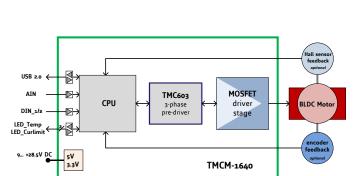
1-Axis Motor Mountable (NEMA17) BLDC Controller / Driver 5A / 24V with Encoder Interface

INFO The TMCM-1640 is an intelligent BLDC motor controller/driver module featuring the new outstanding hallFXTM technology for sensorless, as well as Encoder- or Hall Sensor

The module is designed to be mounted directly on a 42mm flange QMot BLDC motor.

It converts the motor into a compact mechatronic device with serial bus oriented or stand-alone control.

The TMCM-1640 comes with the PC based software development environment TMCL-IDE for the Trinamic Motion Control Language (TMCL™). 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. CANopen firmware will be available optionally.



## MAIN CHARACTERISTICS

ELECTRICAL

- · 9V to 28.5V DC (nom.) supply voltage
- · up to 5A RMS coil current

SUPPORTED MOTORS

- · three phase BLDC motors
- · mountable on QMot motors
- · (42mm/NEMA17)

 USB TNTEREACE

- · Encoder interface
- · general purpose I/Os
- · Status outputs

- FEATURES memory for 2048 TMCL commands
  - hallFX<sup>™</sup> sensorless block commutation
  - · sine commutation
  - · current regulation
  - · positioning
  - · velocity regulation

- stand-alone operation using TMCL™ or remote controlled operation
- · PC-based application development software TMCL-IDE included
- other · pluggable JST connectors
  - · RoHS compliant
  - · size: 42 x 42 mm²

ORDER CODE	DESCRIPTION
TMCM-1640 (-option)	1-axis controller / driver module 5A / 24V
TMCM-1640-CABLE	cable loom including all neccessary cables (single ended)
Related products:	QMot motors QBL42008
ORDER OPTIONS	
TMCL	with TMCL™ firmware