



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 hallFX™ technology for sensorless, as well as Encoder- or Hall Sensor based commutation.

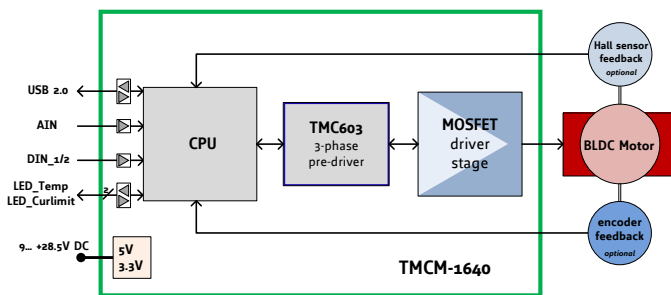
The module is designed to be mounted directly on a 42mm flange QMot BLDC motor.

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 DATA**
 - 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)
- INTERFACE**
 - USB
 - Encoder interface
 - general purpose I/Os
 - Status outputs
- FEATURES**
 - memory for 2048 TMCL commands
 - hallFX™ sensorless block commutation
 - sine commutation
 - current regulation
 - positioning
 - velocity regulation
- SOFTWARE**
 - 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 necessary cables (single ended)
Related products:	QMot motors QBL42008
ORDER OPTIONS	
TMCL	with TMCL™ firmware