TMCM-110-42

**1-Axis
Motor Mounted
Controller / Driver
1.1A / 34V**

10 mm

MAIN CHARACTERISTICS

INFO   The TMCM-110-42 is an intelligent stepper motor controller and driver module to be mounted directly on a 42 mm flange motor. This module converts the motor into a compact mechatronic device with bus oriented or stand-alone control. The motor, switches, power and the multi purpose I/Os can be connected with small pluggable connectors. The TMCM-110-42 comes with the PC based software development environment TMCL-IDE for the Trinamic Motion Control Language (TMCL). Using predefined TMCL high level commands like „move to position" or „constant rotation" a rapid and fast development of motion control applications is guaranteed. The TMCM-110-42 can be controlled via an RS-232, RS-485, I2C or CAN interface. Communication traffic is kept very low since all time critical operations, e.g. ramp calculation are performed onboard. The TMCL program can be stored in the on board EEPROM for stand-alone operation. The firmware of the module can be updated via the serial interface. With the optional stallGuard™ feature it is possible to detect motor overload or motor stall.

ELECTRICAL DATA
· up to 1.1A coil current RMS (1.5A peak)
· 7V to 34V motor supply voltage

SUPPORTED MOTORS
· two-phase bipolar motors with 0.3A to 1.1A coil current

INTERFACE
· RS232, RS485, I²C or CAN 2.0b host interface
· 2 inputs for reference and stop switches
· 1 general purpose input and 1 output

FEATURES
· up to 16 times microstepping
· memory for 2048 TMCL commands
· automatic ramp generation in hardware
· on the fly alteration of motion parameters (e.g. position, velocity, acceleration)
· stallGuard™ for sensorless motor stall detection
· full step frequencies up to 20kHz
· dynamic current control
· TRINAMIC driver technology:
· no heatsink required

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: 42x42 mm²
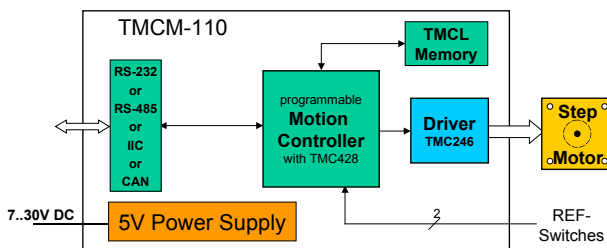
ORDER CODE	DESCRIPTION
TMCM-110-42 (-option)	1-axis controller / driver module 1.1A / 34V
TMCM-110-CABLE	Cable loom (3pcs)
OPTIONS	
232	RS-232 interface
485	RS-485 interface
IIC	I²C interface
CAN	CAN interface