

TMCM-013-42

**1-Axis
Motor Mounted
Step / Direction Driver
1.1A / 30V
with RS-485**

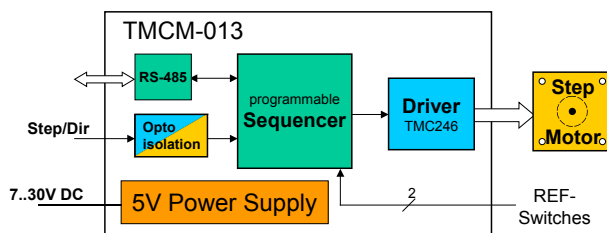
INFO The TCMC-013-42 is a step / direction stepper motor driver for integration directly on a 42 mm / NEMA-17 motor. The TCMC-013-LA supports 42 mm / NEMA-17 linear actuators. The parameters like motor current and μ Step resolution can be changed easily using the RS-485 interface with an ASCII protocol (e.g. with Hyperterminal). Also the firmware of the module can be updated via the serial interface. All settings are stored in an internal EEPROM, so that no bus system is required in the application. The module is fully protected and comes with a stand-alone reference search feature, using the integrated reference switch input or stallGuard™.

The module can be used in step-/direction mode, remote controlled via a RS485 interface, or even as an option in a pseudo DC motor mode.

The possibility to adjust the micro step resolution delivers either very high accuracy or high speed.

MAIN CHARACTERISTICS

- ELECTRICAL DATA**
 - up to 1.1A RMS coil current (1.5A peak)
 - supply voltage 7V to 30V DC
- SUPPORTED MOTORS**
 - two-phase bipolar motors with 0.3A to 1A coil current
- INTERFACE**
 - Step / Direction input (5 – 24V signal) with up to 350kHz microstep frequency
 - driver disable input
 - RS485 host interface (optional use / use for parameterization)
 - local input for reference switches
- FEATURES**
 - optically isolated inputs for Step, Direction and Disable
 - up to 256 times adjustable microstep resolution
 - adjustable standby current
 - reference search and turn CW / CCW via RS485
 - TRINAMIC driver technology: no heatsink required
 - stallGuard™ for reference search full protection / diagnostics
- SOFTWARE**
 - ASCII protocol controlled using simple terminal software
- OTHER**
 - Piggy back for 42 mm (NEMA-17) motor or NEMA-17 linear actuator (axis protrudes through board)
 - RoHS compliant



ORDER CODE	DESCRIPTION
TMCM-013-42	1-axis step / direction driver module 1.1A / 30V
TMCM-013-42-LA	1-axis step / direction driver module 1.1A / 30V for linear actuator
TMCM-013-CABLE	Cable loom