

# PD-1141

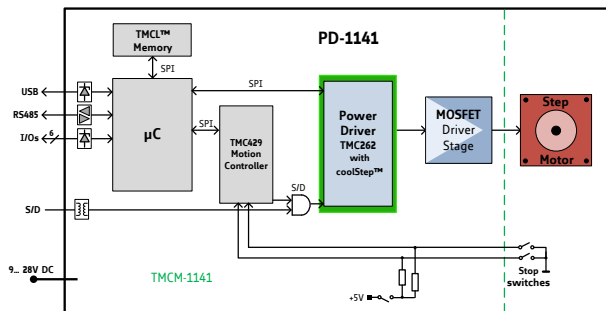
42mm | NEMA 17  
 Stepper Motor with  
 Controller / Driver  
 0.27 - 0.49Nm / 24V  
 sens0step™ Encoder  
 Serial Interface

**INFO** The **PD42-1141** is a very compact and efficient mechatronic solution including a 42mm flange motor and a controller/driver board. It can be controlled via RS485, USB, or step/direction interface or alternatively operated in standalone mode. Power supply, interfaces, and multipurpose inputs and outputs can be connected with JST connectors.

With the advanced **stallGuard2™** feature the motor load can be detected with high resolution. The new outstanding **coolStep™** technology for sensorless load dependent current control allows energy efficient motor operation.

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.

- MAIN CHARACTERISTICS**
- ELECTRICAL DATA**
    - 9V to 28V DC supply voltage
  - MOTOR DATA**
    - flange size 42mm | NEMA17
  - 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 operation using **TMCL** or remote controlled operation
    - PC-based (Windows) application development software **TMCL-IDE** downloadable
  - OTHER**
    - pluggable JST connectors
    - RoHS compliant
    - size: 42 x 42 mm<sup>2</sup>
- \* alternate functions



ORDER CODE	DESCRIPTION
PD42-1-1141	0.27Nm / QMot motor QSH4218-35-10-027
PD42-2-1141	0.35Nm / QMot motor QSH4218-41-10-035
PD42-3-1141	0.49Nm / QMot motor QSH4218-51-10-049
PD-1141-CABLE	Cable loom including all necessary cables (single ended)