

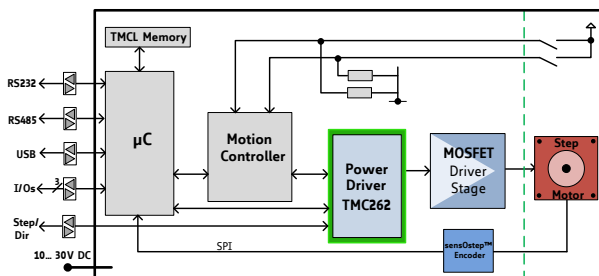
# PD-1161

57/60mm | NEMA23/24  
 Stepper Motor with  
 Controller / Driver  
 sensOstep™ Encoder  
 Serial Interface

**INFO** The PANdrive PD57-1161 and PD60-1161 family is a mechatronic solution including a 57mm or 60mm flange motor, a controller board and a sensOstep™ encoder. It can be controlled via serial interface or operated in standalone mode. Power supply, external encoder, interface and I/Os can be connected with JST connectors.

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



### MAIN CHARACTERISTICS

- ELECTRICAL DATA**
  - nom. 24V DC supply voltage (10V to 30V)
- MOTOR DATA**
  - flange size 57/60mm | NEMA23/24
- INTERFACE**
  - USB, RS232, RS485
  - step&direction interface
  - inputs for ref. & stop switches
  - general purpose I/Os
- 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
  - integrated absolute sensOstep™ encoder with 1024 ppr.
  - 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**
  - RoHS compliant

ORDER CODE	DESCRIPTION
PD57-1-1161	0.55 Nm / QMot motor QSH5718-41-28-055
PD57-2-1161	1.01 Nm / QMot motor QSH5718-51-28-101
PD60-3-1161	2.10 Nm / QMot motor QSH6018-65-28-210
PD60-4-1161	3.10 Nm / QMot motor QSH6018-86-28-310
TMCM-1161-CABLE	Cable loom including all necessary cables (single ended)