

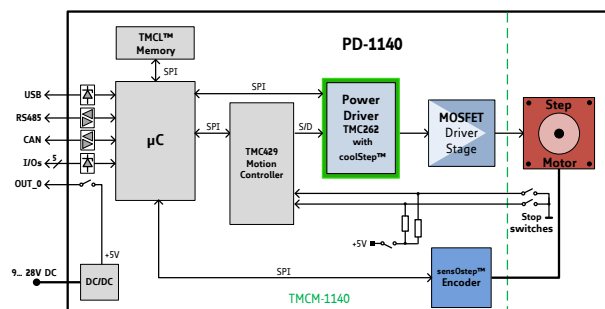
## PD-1140

42mm | NEMA 17  
Stepper Motor with  
Controller / Driver  
0.22 - 0.70Nm / 24V  
sensOstep™ Encoder  
Serial Interface

**INFO** The **PD42-1140** is a very compact and efficient mechatronic solution including a 42mm flange motor, a controller/driver board and a **sensOstep™** encoder. It can be controlled via RS485, USB, or CAN 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, and CAN  |
| FEATURES        | <ul style="list-style-type: none"> <li>• inputs for ref. &amp; stop switches</li> <li>• general purpose I/Os</li> <li>• up to 256 times microstepping</li> <li>• memory for 2048 TMCL™ commands</li> <li>• stallGuard2™ sensorless load detection</li> <li>• coolStep™ sensorless load dependent current control</li> <li>• microPlyer™ 16 to 256 times microstepping interpolation</li> <li>• integrated absolute sensOstep™ encoder with 1024 pps.</li> <li>• automatic ramp generation in hardware</li> <li>• on the fly alteration of motion parameters</li> </ul> |
| SOFTWARE        | <ul style="list-style-type: none"> <li>• standalone operation using TMCL or remote controlled operation</li> <li>• PC-based (Windows) application development software TMCL-IDE downloadable</li> </ul>  |
| OTHER           | <ul style="list-style-type: none"> <li>• pluggable JST connectors</li> <li>• RoHS compliant</li> <li>• size: 42 x 42 mm²</li> </ul>  |

ORDER CODE	DESCRIPTION
PD42-1-1140	PANdrive 0.22Nm max.
PD42-2-1140	PANdrive 0.36Nm max.
PD42-3-1140	PANdrive 0.44Nm max.
PD42-4-1140	PANdrive 0.70Nm max.
PD-1140-CABLE	Cable loom including all necessary cables (single ended)



# Mouser Electronics

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