

Zikostep 1 Stepper Motor controller - Technical Datasheet (REV-A)











Product Definition: A high quality, easy to use stepper motor controller designed and manufactured in United Kingdom. Capable of fitting on top of a stepper motor, with dedicated software to operate the controller via laptop or a PC.

Key Features:

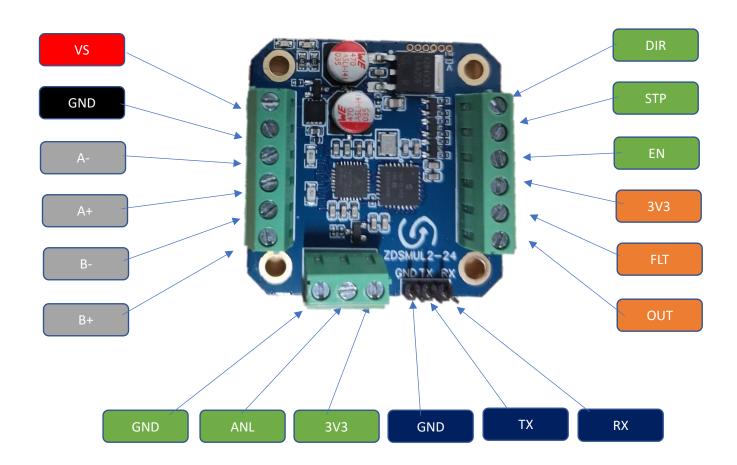
- UART Connectivity
- Dedicated Software
- Full Step to 256 Microsteps
- Programmable Output Pin
- Controllable via step input
- Analogue speed and direction control
- Easy to operate
- Clean and compact design
- Casing Included
- Fits on top of a stepper motor

Technical Specifications:

Parameter	Value	
Operating Voltage	5 to 24VDC	
Maximum Phase Current	Up to 2 Amps **	
Microstep Resolution	1, ½ , ¼ , 1/8, 1/16, 1/32, 1/64, 1/128, 1/256	
Operating Temperature	-20C to 60C	
Weight – Without Casing (g)	15	
Weight – With Casing (g)	50	
Casing Included	Yes (Uncased available)	
Casing Materials	Anodised Aluminium	
UL Rating	UL94 (V0)	
ROHS Compliant	Yes	
REACH Compliant	Yes	
Country of Origin	UK	
Max NEMA Size	NEMA 23 (subject to being within tolerance)	
Overtemperature protection	Yes	
Cable diameter for connector	1.5 sq. mm	
Header Pin Pitch	2.54 mm	
3-way and 6-way connectors pitch	1.27 mm	

^{**} NOTE: Under certain operating conditions (for example high current, low speed at a relatively high ambient temperature and 100% duty cycle), the controller will get hot. Care must be taken to ensure the unit is adequately heatsinked and cooled in such circumstances. If you have a specific requirement or application where this may be relevant, then please contact our team to discuss suitability and we will be happy to advise.

Connections on the Zikostep 1:



Terminals		Terminals	
Vs	Power	GND	Analogue Speed
GND	Connections	ANL	Input
A-	Motor	3V3	
A+	Connections	DIR	Direction Input
B-		STP	Step Input
B+		EN	Enable Input
GND	UART	3V3	3.3V Output Rail
Tx	Connections	FLT	Fault Output
Rx		OUT	Programmable
			Output

Product Dimensions:

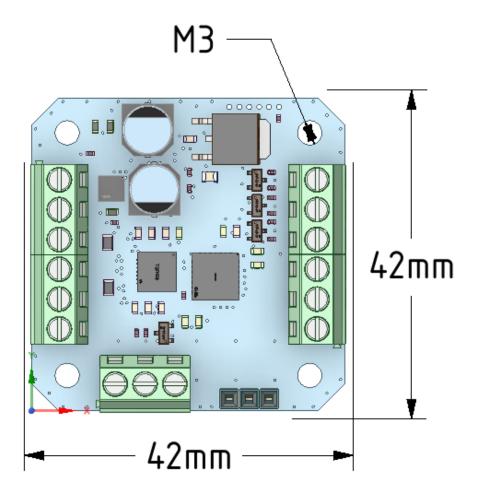


Figure 1: Top View (Without Casing)

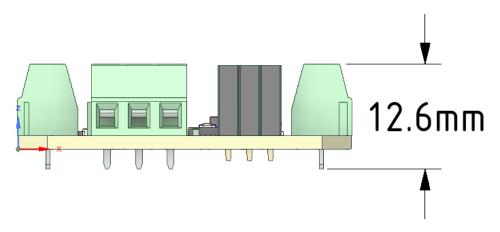


Figure 2: Front View (Without Casing)

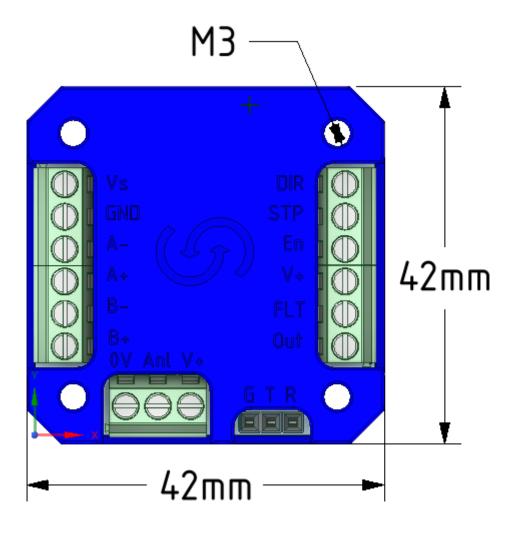


Figure 3: Top View (With Casing)

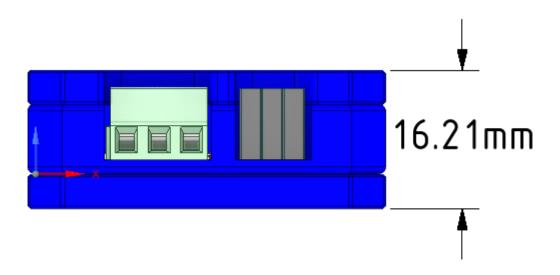


Figure 4: Front View (With Casing)