

Enjoy the benefits of Unjo Tiger. Flexible motor control.



- Delivered with customised software.
- Available in small quantities.
- Very short delivery time for customised unit and minimal initial investment.
- 2 DC-motors can be controlled, either synchronised or independent of each other, by the same unit.
- 450 W, drive and controller in one unit.



Technical specifications

General:	Semi standard motor control unit for 2 or 3-phase step motor, brushless DC-motor or 1 or 2 brushed DC motors.	
Commutation:	BLDC: - Block, with hall sensors or sensorless.	
	- Sinusoidal.	
	Step motor: Up to 128 micro steps.	
Supply:	Nominal 18 – 48 VDC.	
Powerstage:	Max 10 A continuously at 18 – 48 V.	
Inputs, 24 VDC:	4 digital inputs for 24 VDC systems. Switching level approx. 7 V. Configurable with 10 k Ω local pull-up to incoming supply voltage, or pull down to ground.	
Inputs, encoder/ hall sensors:	2 connections for encoders with index pulse or digital hall elements for BLDC. Each connection delivers 5 or 10 VDC sensor supply and has 3 inputs with local pull-up to sensor supply.	
Inputs, analogue:	2 differential analogue inputs for ±10 VDC. AD conversion with 10 bits resolution.	
Outputs, 24 VDC:	2 digital outputs for 24 VDC system. The outputs can be configured with open collector and can sink approx. 30 mA with 22 k Ω local pull-up to incoming supply voltage or push/pull that can source or sink approx. 30 mA.	
Communication:	RS-232 via 9-pole D-sub connector and RS-232 or RS-422 / RS-485 via separate connector.	

	Parameter memory (non volatile):	Adjustable parameters are arranged according to customer demands.
	Dimensions:	PCB: LxWxH = 107.5 x 73.5 x 26 mm.
		With mounting adapter for DIN rail $LxW = 116 \times 76 mm$.
Additional features/ daughter boards:	Additional features/	Analogue hall sensors.
	Analogue differential hall sensors.	
	Digital outputs.	
		Analogue outputs.
		Relay/opto-coupled outputs.
		CAN 2.0 B (up to 1 Mbit/s).
		USB.
	Software:	A large number of basic modules are available, for example motor control and communication. These are utilised by an overall application soft- ware, which is unique for each customer project. The modular design of the basic functions allows the application program to be designed and verified in a very limited period of time. This means that the customer's investment can be kept very low, without increasing the unit cost.

Unjo is a rapidly expanding and world-leading company that develops, designs and produces customized motor controllers and motor control systems that meet our customers' high demands for cost efficiency and performance.

