



# MTDV1CH-22A2

Motion controller for bipolar stepper motors with additional encoder input

## SPECIFICATIONS

Partnumber MTDV1CH-22A2

### Electrical specifications

Voltage	(V)	24
Power consumption max	(W)	38
Interfaces	Ethernet (TCP/IP), USB2.0 (custom serial), RS485 (custom serial)	
Connectors	1x RJ45, 1x USB Type A, 2x Terminal blocks, Nx DB15HD female	
Visual indicators	Ethernet activity LED, RGB LED for each motor status	
Protections	ESD, polarity inversion, overvoltage, undervoltage, output overcurrent, shorted output, open output, overtemperature	

### Functions

Non volatile memory	Yes	
Automatic position saving	Yes	
Software	Integrated web interface (Ethernet), DLL library (Ethernet, USB and RS485)	
Control type	Closed-loop, open-loop	
Motion mode	Positioning mode (relative and absolute) with 2 stage velocity ramp	
Special features	Advanced motor drive with StealthChop™ and 256x SpreadCycle™, extremely silent operation, adjustable RUN and HOLD currents for optimized power consumption, advanced positioning control in closed-loop operation, motor homing based on encoder reference or limit switch, reduced EMI noise	

### Motor parameters 3

Number of motors	1	
Type	Bipolar stepper	
RMS winding current	(mA)	20 to 1350 (adj)
Peak winding voltage	(V)	24 (PWM)

### Encoder parameters 3

Number of encoders	1	
DC power supply	5	
Type	Linear / rotary, incremental	
Signal outputs	A, B, Z (index)	
Interface	RS422	

### Environmental specifications

Operating temperature	(°C)	10 to 40
Storage temperature	(°C)	0 to 50
Humidity	(%)	10-85 non condensing
IP rating	-	
Installation	Indoor use only	

### Mechanical specifications

Length	(mm)	47
Height	(mm)	84



Width (case only)	(mm)	80.2
Width (total)	(mm)	102.6
Material		Anodized aluminum
Mount		DIN rail

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**Compatibility 4**

Lenses		TCZRS
Cable 5		CBMT002, CBETH003
Accessories		ADPT001

**NOTES**

1. N represents the number of channels.
2. StealthChop™ and SpreadCycle™ are property of their respective owners.
3. For a complete list of specifications please refer to the user manual.
4. All compatible products must be ordered separately.
5. CBMTxxx cables are required to connect MTDV to compatible lenses.  
See the lens product page for more informations on the proper cable to order.