V-BMB

Precision Control Solutions Made Simple

MOTORIZED FILTER WHEELS

We offer a range of high performance motorized filter wheel modules with integrated controller for the most demanding optical imaging applications.

7-Position
VFW1007

10-Position
VFW1010

Ultra Fast Switching

Built-In Smart Controller

Easy to Use

ABOUT OUR PRODUCT

Featuring our innovative motion control algorithm and enhanced encoder resolution technology, motorized filter wheel modules are compact long-lasting filters changers that provide smooth and fast adjacent filter change with ultra-fast switching time between filters, making them ideal for a variety of applications, including fluorescence microscopy, spectroscopy, machine vision, and more.
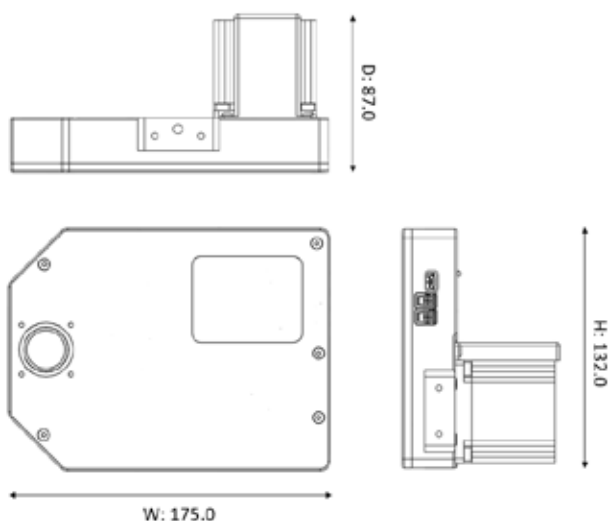
Features

- Ultra-fast switching with adjacent filter switching time of 35ms (10 positions wheel) and 45ms (7 positions wheel)
- Convenient with built-in smart controller
- Easy to use with supplied software Application Programming Interface (API)
- Versatile to fit many applications
- Flexible with capability to daisy-chain with other V-BMB modules
- Available in two filter sizes with filter holder for 25mm optics (10 positions) or 32mm optics (7 positions)

VBMB PTE LTD (V-BMB)

Specifications

	VFW1007 (7-Position)	VFW1010 (10-Position)
No. of Filter Holder Positions	7	10
Switching Time, ms (Adjacent Filter)	45	35
Motor Type	Stepper (2 phase, hybrid)	
Range	360°	
Controller	Built In, Daisy-Chain with other V-BMB products	
Accuracy (Unidirectional)	0.2°	
Repeatability	<0.04°	
Backlash	<0.19°	
Speed Resolution	0.0035°/sec	
Maximum Speed	2800°/sec	
Limit or Home Sensing	Magnetic home sensor	
Communication Interface	USB / RS-485 / TTL UART	
Daisy-Chain Capability	Yes	
Input Voltage	24VDC	
Input Max Current, A	2.0	
Compatible Filter Diameter, mm	31-32	25
Clear Aperture, mm	30	23.5
Compatible Filter Thickness, mm	Up to 6.5	
Weight, kg	1.66	1.69
Dimension, WxDxH, mm	175 x 87 x 132	

D: 87.0

H: 132.0

W: 175.0

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