

DM542EU/ DM442/ EM542S

Comparison



Leadshine has a wide product range with over 10 million drivers in the market in different price ranges and performances. Below is a comparison of stepper motor drivers for output current of up to 4.2 Ampere.

Comparison of Digital Drivers

DM542EU/ DM442/ EM542S



DM542EU



DM442



EM542S

	DM542EU		DM442		EM542S		
Auto-tuning	✓		✓		✓		
Anti-resonance	✓		✓		✓		
Extra-low motor noise	✓		✓		✓		
Idle-current reduction	✓		✓		✓		
Protection for over-voltage/ over-current	✓		✓		✓		
Optical isolated inputs	✓		✓		✓		
Input PUL/ DIR	✓		✓		✓		
CW/ CCW mode	✗		✓		✓		
RS232 programming	✗		✓		✓		
Fault & Brake Output	✗		✗		✓		
Self-test via DIP switch	✗		✗		✓		
Current setting via software (steps 0.1 A)	✗		✓		✓		
Current setting via DIP switches (steps)	8		8		8		
Steps/ revolution via DIP switches	400 - 25,600		400 - 25,600		200 - 25,600		
Selectable micro-step resolutions via DIP switches	16		16		16		
Steps/ revolution via software (increase by 200)	N		200 - 102,400		200 - 51,200		
Voltage tolerance of inputs (High Level)	3.3 - 5.0 V (TTL)		3.3 - 5.0 V (TTL)		3.3 - 5.0 V (TTL)/ 12 - 24 V		
Dimensions [mm]	118 x 75.5 x 25.5		116 x 69.2 x 26.5		118 x 75.5 x 25.5		
Connectors	WANJIE: WJ2EDGK, 5.0 mm pitch, 2-pin WANJIE: WJ2EDGK, 5.0 mm pitch, 4-pin WANJIE: WJ2EDGK, 5.0 mm pitch, 6-pin		ANYTEK: TJ, 3.81 mm pitch, 2-pin ANYTEK: TJ, 3.81 mm pitch, 4-pin ANYTEK: TJ, 3.81 mm pitch, 6-pin		ANYTEK: TJ, 3.81 mm pitch, 3-pin ANYTEK: TJ, 3.81 mm pitch, 6-pin ANYTEK: TJ, 5.0 mm pitch, 2-pin ANYTEK: TJ, 5.0 mm pitch, 4-pin		
Weight	227 g		200 g		250 g		
	Min	Max	Min	Max	Min	Max	Units
Output current via DIPs	1.0	4.2	1.46	4.2	1.0	4.2	A
Output current via SW			0.5	4.2	0.5	4.2	A
Supply voltage	20	50	20	40	20	50	VDC
Logical signal current	7	16	7	16	7	16	mA
Pulse input frequency	0	200	0	200	0	200	kHz
Minimal pulse width	2.5		2.5		2.5		µs
Minimal direction timing	5.0		5.0		5.0		µs
Insulation resistance	500		500		500		MΩ