

# Harmonic Drive Systems Inc.

## AC Servo Drivers HA-680ML series

### Features

- Small and compact design  
It is about half the size of a postcard, just the size of a card case. Its ultra-light design with a weight of 230 g is useful for small, space-saving devices.
- Substantial functions  
Position control, speed control, and torque control are provided as standard. It is compact and has substantial functions at the same time.
- Easy function setting  
Parameters can be set easily using dedicated communication software PSF-520.



HA-680ML

### Specifications

Item		Specifications
MECHATROLINK communications	Protocol	MECHATROLINK- II
	Node address setting	41H to 5FH (Max. number of slaves: 30)
Supply voltage		DC24V (20 to 28V)
Control method		Sinusoidal PWM control switching frequency 12.5kHz
Encoder		4-line specification, serial transmission method, line driver input
Encoder monitor		Phase-A, B, Z line driver output
I/O signal		DI: 5 points (insulation with photo coupler) DO: 5 points (insulation with photo coupler)
Protection function		Overload, Max. deviation, Encoder break detection, encoder reception error, UVW error, regenerative error, operating temperature error, system error, overcurrent, load short circuit, memory error, overspeed
Regenerative absorption circuit		Incorporated (with an external capacitor/resistor installation terminal). The built-in resistance has a fuse.

### MECHATROLINK specifications

		M- I	M- II	
		17-byte	17-byte	32-byte
Command	Servo	—	×	×
Transmission cycle		1ms, 2ms, 3ms, 4ms, 5ms		

### Contact Information

Harmonic Drive Systems Inc.

总公司 東京都品川区南大井六丁目25番3號  
海外事業本部 長野県安曇野市穂高牧1856-1  
穂高工廠 長野県安曇野市穂高牧1856-1

TEL : +81-3-5471-7800

TEL : +81-263-83-6935

TEL : +81-263-83-6800

FAX : +81-3-5471-7811

FAX : +81-263-83-6901

FAX : +81-263-83-6901

URL : <https://www.hds.co.jp/chinese/>