MD-730 Series
200W~750W Servo Drive System

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With the rapid development of industrial automation, intelligent manufacturing, and robotics technology, the demand for high-precision, high-dynamic-response, and high-reliability motion control is increasing day by day. MEAN WELL, the global leader in standard power supplies with over 40 years of experience in the standard power supply field, launches the MD-730 series servo drives based on high cost performance and high product efficiency. The series includes bus-type and pulse-type control methods, with a total of 6 products covering 200W, 400W, and 750W. It provides excellent performance for standard applications in 3C, photovoltaic, battery, packaging, and many other industries, offering enterprises efficient productivity.

As a compact system solution, the MD-730 series servo drives adopt a new generation of power devices and innovative designs, significantly reducing the overall space required and greatly improving the flexibility of drive system layout. Integrated with communication interfaces, it enables quick and simple connection with control systems, and provides one-click upload/download and FOE functions to enhance production efficiency. With a 2 kHz speed loop bandwidth, the command tracking is faster, effectively shortening the settling time for position arrival. The entire series uses higher-performance main control chips, further improving communication interaction capabilities. It supports a 125μs synchronization cycle for all EtherCAT operating modes. Through precise adjustment of the EtherCAT distributed clock, it achieves 300 nodes over a 120 m distance, with a synchronization error of 15 ns and a synchronization jitter of ±20 ns. The position loop control is synchronized with the synchronization signal, further improving the synchronization of multi-axis control. The enhanced jitter suppression function can simultaneously suppress two types of low-frequency jitters at the end of the device. Both the servo drive and servo motor are equipped with temperature protection functions, which directly monitor the product's temperature status through sensors to detect and prevent faults early, further improving product safety.

Features:

- 2 kHz speed loop bandwidth
- Supports 17-bit absolute encoder
- Supports 125μs synchronization cycle
- Supports 300 nodes over 120 m distance, with 15 ns synchronization error and ±20 ns synchronization jitter
- Compatible with various mainstream controllers
- Compact size design to meet installation requirements in harsh space conditions
- One-click upload & download to improve production efficiency; high-quality motor bearings extend service life

Complete Product Specifications

Series Name	MD-730N-020/040	MD-730N-075	MD-730P-020/040	MD-730P-075
Control Method	EtherCAT Bus Type	EtherCAT Bus Type	Pulse Type	Pulse Type
Dimensions (Lx Wx H)	40x 161x 150mm	50x 161x 174mm	40x 161x 150mm	50x 161x 174mm
Input	AC200~240V	AC200~240V	AC200~240V	AC200~240V
Output	200W / 400W	750W	200W / 400W	750W
Encoder	17-bit multi-turn absolute encoder			
Communication Interface	EtherCAT	EtherCAT	MODBUS	MODBUS
Brake Resistor	External	Built-in	External	Built-in
Operating Temp.	0℃~55℃	0℃~55℃	0℃~55℃	0℃~55℃
Weight	0.78kg	1.04kg	0.78kg	1.04kg