

# HB Jupiter Servo Drives



- Designed with leading Dual 32 bit DSP chip and manufactured by adopting high quality component
- High bandwidth and Full digital regulation.
- Fast response and high precision
- Excellent Performance and Features
- Multi-Functionality
- Advanced Operation Software and Monitor Tool
- Wide range from rated current 06A to ultimate 100A.

## Specifications

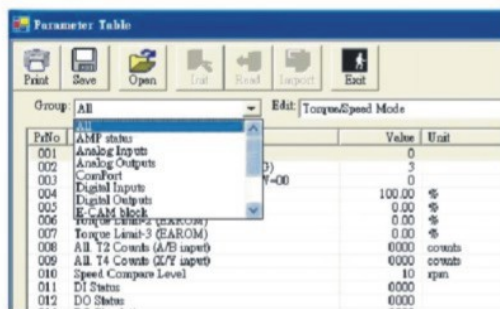
|                          |                     |                                                                                                                                                                      |             |             |
|--------------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|
| Model Number             |                     | JMD-STD-06A                                                                                                                                                          | JMD-STD-09A | JMD-STD-15A |
| Output Current (Amp)     |                     | 6A/18A                                                                                                                                                               | 9A/27A      | 15A/45A     |
| Power Input              |                     | Single/Three-Phase 220V AC, 50/60Hz                                                                                                                                  |             |             |
| Power output             |                     | Three-Phase 0 ~ Input Power Voltage                                                                                                                                  |             |             |
| Sinusoidal PWM           |                     | IGBT Sinusoidal Pulse-Width-Modulation (10Khz)                                                                                                                       |             |             |
| Encoder type             |                     | Incremental                                                                                                                                                          |             |             |
| Control mode             |                     | Torque, Speed, Position control modes & Embedded Motion Profiles                                                                                                     |             |             |
| Modes :                  | P-command Mode      | 1. Pulse input : A/B phase, CW/CCW or Clock/Direction<br>2. Bit rate : ~ 1M bps<br>3. Gear ratio : 50000 ~ 1/50000                                                   |             |             |
|                          | SP2P mode           | 1. 16 independent position/Length<br>2. 4 selectable velocity profile<br>3. Mixed Absolute/Incremental mode<br>4. Metric number setting<br>5. Multi-mode Home-Search |             |             |
|                          | Speed Control mode  | 1. Control Range 30000 : 1<br>2. 8 Preset Speed, by 3-bits DIX<br>3. 4 Torque Limit setting, by 2-bits DIX                                                           |             |             |
|                          | Torque Control mode | Settable Speed Droop range                                                                                                                                           |             |             |
| Protection               |                     | Over-Potential, Over-Current, Over-Load, Over-Speed, Encoder-Fault                                                                                                   |             |             |
| Encoder Simulated Output |                     | 1/N (N=1,2,4,8,16,32), or Fixed Frequency : 250K, 125K, 62.5K                                                                                                        |             |             |
| Control Power            |                     | External +24V DC power supply                                                                                                                                        |             |             |
| Digital Input DI (x)     |                     | 8 Standard bi-directional photo-isolated inputs (DI1 ~ D18)<br>X/Y Clock input Mark & Cut Capture inputs                                                             |             |             |
| Digital Outputs DO (x)   |                     | Bi-directional Photo-isolated outputs (DO1 ~ DO4)                                                                                                                    |             |             |
| Analog Input             |                     | 12bits resolution A/D inputs : AI1 & AI2<br>2.5Khz sampling rate                                                                                                     |             |             |
| Analog Output            |                     | 12bits resolution D/A outputs : AO1 & AO2<br>2.5Khz refreshing rate                                                                                                  |             |             |
| Communication            |                     | RS-232, RS-422, RS-485, Modbus ( ~115200bps), CAN Open (Option)                                                                                                      |             |             |
| Environ-ment             | Temperature         | 0 ~ 50℃                                                                                                                                                              |             |             |
|                          | Humidity            | ~ 85% RH                                                                                                                                                             |             |             |
|                          | Vibration           | ~ 0.5G                                                                                                                                                               |             |             |
| Ventilation              |                     | Forced cooling                                                                                                                                                       |             |             |



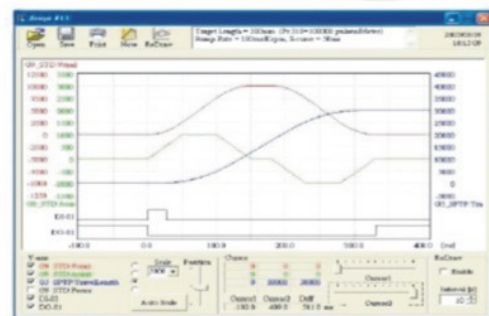
## Main Features

- ◎ 、 Dual 32bit DSP design, Embedded Motion controller with Servo Drive
- ◎ 、 Multi-Functionality : Torque mode, Speed mode, Position mode, Smart Point to Point
- ◎ 、 100us sampling rate & calculation loop
- ◎ 、 1 Mbit/sec, High speed pulse command input (A/B phase, CW/CCW, CK/DIR)
- ◎ 、 2 fast digital inputs for High-Speed signal capture
- ◎ 、 8 multi-functional bi-directional digital inputs
- ◎ 、 Simulation encoder output (N=1, 1/2, 1/4,....., 1/64), or fixed frequency output  
250K, 125K and 62.5K
- ◎ 、 4 multi-functional digital outputs (both PNP/NPN compatible)
- ◎ 、 Analog input 2 channels, 12bit resolution
- ◎ 、 Analog output 2 channels, 12bit resolution
- ◎ 、 RS485/RS422/RS232, Modbus RTU protocol, 9600 ~ 115200bps,  
CAN Open (OPTIONAL)
- ◎ 、 Direct Metric number conversion system, high resolution setting 0 ~  
1,000,000.000(mm)
- ◎ 、 SP2P (Smart Point to Point) mode, 16 Length/Position data selectable
- ◎ 、 All sinusoidal acceleration and deceleration velocity profile
- ◎ 、 Special E-CAM Switch, Shift-Register, and auxiliary Timer, Counter
- ◎ 、 Advanced Commissioning/Monitoring software : What you see, what you get !
- ◎ 、 Optional Function :
  - Rotary CUT
  - Flying CUT
  - Print mark registration

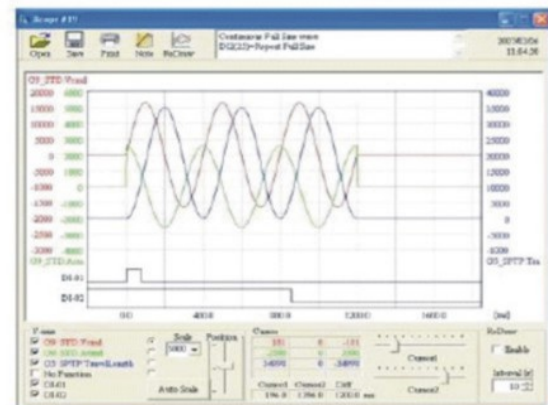
◎Friendly "Servo Win" commissioning software is capable for easy read/write parameters, monitoring system and may keep the application project in file.



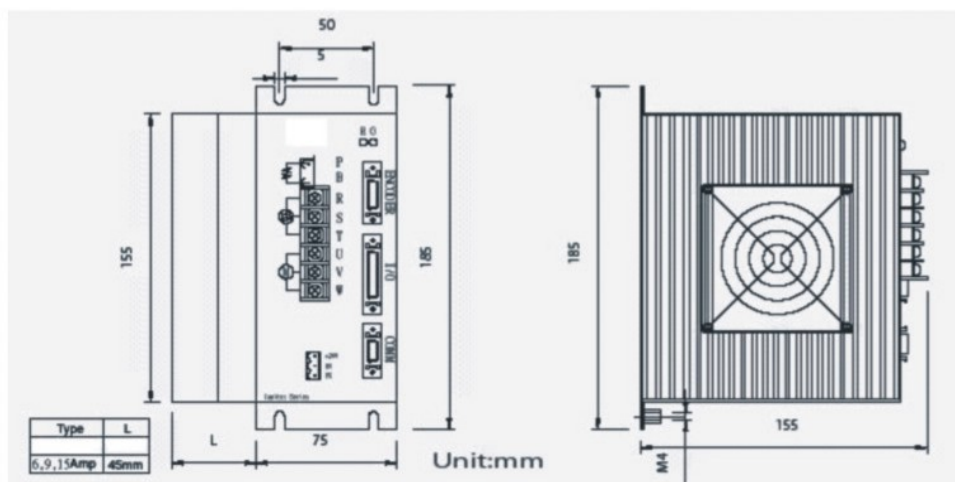
◎Standard S-Curve trapezoidal motion Profile provide smooth Auto point to point Motion control.



◎Auxiliary Soft-Scope Tool enable user to observe system performance whenever in need.



## Mechanical Dimension Size



**HPB TECHNOLOGY CO.,LTD.**

6F, NO. 256, SEC. 5, CHUNG HSIAO E. ROAD, TAIPEI, TAIWAN, R. O. C.

TEL: 886-2-27201366 FAX: 886-2-27203883

E-mail : hpbtech@ethome.com.tw Web-site : www.hpb-industry.com