HIGH-VOLTAGE MINI SERVO DRIVE

WEM-D310/02-FS00A5-E (Size : 86.5×63.5×33.8mm)

W : 179g

Ratings	02
Continuous Output Current A	2
Peak Output Current A	6

Basic Specifications		
Feature	**Specification**	
Motors	DC / BLDC / PMSM / VCM	Rotary servo motors, Linear servo motors
Current (Torque) Control	Control Periodic	20KHz
	Control Loop	PI + Feed-forward
Velocity & Position Control	Control Periodic	4KHz
	Control Loop	Cascade P/PI + Feed-forward
	Filters	First order low pass filter, Four notch filters, First order adaptive windowing filters
Reference Command	Current / Velocity / Position	USB, EtherCAT(CoE, FoE)
Auto Tuning	Method	Automatic self-configuration and optimization of motor phasing, wires, current loop, velocity control loop.
GUI	User Interface	WELSS(WelconServoStudio), Setting, Drive, Motor, Feedback, I/O, Motion
Input voltage	Motor Voltage: 12V~310VDC, Control Voltage : 24VDC	
Protective Functions	Under- and over-voltage, Over-current, Over-load(with I^2T), Drive over-temperature	
Environment	• Ambient temperature : Operation 0~50℃, Storage 0~70℃ • Humidity : 10~90% • Vibration : 1.0g	
Compliance Standard	CE, KC	

Communication	
Feature	**Specification**
USB	• Baud rate : up to 3Mbps • Maximum cable length : 3m
EtherCAT	100Mbps, Communication cycle time : up to 250μs
CAN	Not Supported
RS-485	Not Supported

I/O		
Feature	**Specification**	
Analog Input	Quantity	2
	Voltage Range	Analog ±10 VDC differential
	Input Resolution	14bit
Digital Inputs	Quantity	6
	Signal	Configurable. Opto-isolated.
	Voltage	24V
Digital Outputs	Quantity	2
	Signal	Configurable. Opto-isolated.
	Voltage	24V
	Max. Output Current	40mA
Brake	Use one of digital outputs (40mA)	

Motor Feedback		
Feature	**Specification**	
General	Supply Voltage	5VDC
Incremental Encoder	Signal	A-quad-B with or without index, RS422, Differential
	A-quad-B Max Input Frequency	10MHz (before quadrature)
Digital Hall Sensor	Signal	Singled-ended
	Type	Separated hall sensor
Analog Hall Sensor	Signal	Not Supported
	Sampling Frequency	
Sin/Cos Encoder	Signal	Not Supported
	Sampling Frequency	
Serial Encoder	Type	SSI, BiSS-C, Tamagawa, Panasonic
	Bite rate	0.5Mbps, 1Mbps, 2Mbps, 2.5Mbps, 5Mbps