

# STANDARD SERVO DRIVE 40A

WER-D048/40-FS04A7-E, -C, -R (Size :160×108×35mm)



W:723g

Ratings	40
Continuous Output Current A(rms)	40
Peak Output Current A(rms)	80

## Basic Specifications

Feature	Specification	
<b>Motors</b>	DC / BLDC / PMSM / VCM	Rotary servo motors, Linear servo motors
<b>Current (Torque) Control</b>	Control Periodic	20KHz
	Control Loop	PI + Feed-forward
<b>Velocity &amp; Position Control</b>	Control Periodic	4KHz
	Control Loop	Cascade P/PI + Feed-forward
	Filters	First order low pass filter, Four notch filters, First order adaptive windowing filters
<b>Reference Command</b>	Current / Velocity / Position	USB, CAN(CANopen), EtherCAT(CoE, FoE), RS-485
<b>Auto Tuning</b>	Method	Automatic self-configuration and optimization of motor phasing, wires, current loop, velocity control loop
<b>GUI</b>	User Interface	WELSS(WelconServoStudio), Setting, Drive, Motor, Feedback, I/O, Motion
<b>Input Voltage</b>	• Motor Voltage : 12~48VDC(H/W Limit 10~90V) • Control Voltage : 24VDC(H/W Limit 10~90V)	
<b>Protective Functions</b>	Under- and over-voltage, Over-current, Over-load (with I <sup>2</sup> T), Drive over-temperature	
<b>Environment</b>	• Ambient temperature : Operation 0~50°C, Storage 0~70°C • Humidity : 10~90% • Vibration : 1.0g	
<b>Compliance Standard</b>	CE, TUV	

## Communication\*

Feature	Specification	
<b>USB</b>	• Baud rate : up to 3Mbps • Maximum cable length : 3m	
<b>CAN*</b>	Bit rate : 125kbps ~ 1Mbps	
<b>EtherCAT*</b>	100Mbps, Communication cycle time : up to 250µs	
<b>RS-485*</b>	Baud rate : 9200bps ~ 3Mbps	

## I/O

Feature	Specification	
<b>Analog Input</b>	Quantity	2
	Voltage Range	±10 VDC differential, Motor Temperature
	Input Resolution	14bit
<b>Digital Inputs</b>	Quantity	6 + 2 STO(H/W)
	Signal	Configurable. Opto-isolated.
	Voltage	24V
<b>Digital Outputs</b>	Quantity	2 + 1 STO(H/W)
	Signal	Configurable. Opto-isolated.
	Voltage	24V
	Max. Output Current	40mA
<b>Brake</b>	Use one of digital outputs (40mA)	

## Motor Feedback

Feature	Specification	
<b>General</b>	Supply Voltage	5VDC
<b>Incremental Encoder</b>	Signal	CH1 : A-quadrature with or without index, RS422, Differential CH2 : A-quadrature with or without index, Single-ended
	A-quadrature Max Input Frequency	10MHz (before quadrature)
<b>Digital Hall Sensor</b>	Signal	Single-ended
	Type	Separated hall sensor
<b>Analog Hall Sensor</b>	Signal	Not supported
	Sampling Frequency	
<b>Sin/Cos Encoder</b>	Signal	Not supported
	Sampling Frequency	
<b>Serial Encoder</b>	Type	SSI, BiSS-C, Tamagawa, Panasonic, EnDat2.x
	Bite rate	0.5Mbps, 1Mbps, 2Mbps, 2.5Mbps, 5Mbps

\*Optional