

2-AXIS DRIVE 20A [Stand Alone Type]

WE2A-D048 / 20-FS04A7-E,-C,-R (Size : 170×128×32mm)



Ratings	10	20
Continuous Output Current A(rms)	10	20
Peak Output Current A(rms)	20	40

Basic Specifications		
Feature	Specification	
Number of control axes	2	
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, CAN(CANopen), EtherCAT(CoE, FoE), RS-485
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	<ul style="list-style-type: none"> Motor Voltage : 12~48VDC(H/W Limit 10~90V) Control Voltage : 24VDC(H/W Limit 10~90V) 	
Protective Functions	Under- and over-voltage, Over-current, Over-load(with I ² T), Drive over-temperature	
Environment	<ul style="list-style-type: none"> Ambient temperature : Operation 0~50°C, Storage 0~70°C Humidity : 10~90% Vibration : 1.0g 	
Compliance Standard	CE, TUV	

Communication*		
Feature	Specification	
USB	<ul style="list-style-type: none"> Baud rate : up to 3Mbps Maximum cable length : 3m 	
CAN*	Bit rate : 125kbps~1Mbps	
EtherCAT*	100Mbps, Communication cycle time : up to 250μs	
RS-485*	Baud rate : 9200bps~3Mbps	

I/O		
Feature	Specification	
Analog Input	Quantity	2x2
	Voltage Range	±10 VDC differential, Motor Temperature
	Input Resolution	14bit
Digital Inputs	Quantity	6x2 + 2x2 STO(H/W)
	Signal	Configurable. Opto-isolated.
	Voltage	24V
Digital Outputs	Quantity	2x2 + 1x2 STO(H/W)
	Signal	Configurable. Opto-isolated.
	Voltage	24V
	Max. Output Current	40mA
Brake	Use one of digital outputs (100mA)	

Motor Feedback		
Feature	Specification	
General	Supply Voltage	5VDC
Incremental Encoder	Signal	CH1 : A-quad-B with or without index, RS422, Differential CH2 : A-quad-B with or without index, Single-ended
	A-quad-B Max Input Frequency	10MHz (before quadrature)
Digital Hall Sensor	Signal	Single-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, EnDat2.x
	Bite rate	0.5Mbps, 1Mbps, 2Mbps, 2.5Mbps, 5Mbps

*Optional