

DINGS'

Precision Motion Specialist

MOTION CONTROLLER PRODUCT INTRODUCTION

Stand Alone Stepper Electronics [OPEN LOOP type / CLOSED LOOP type]

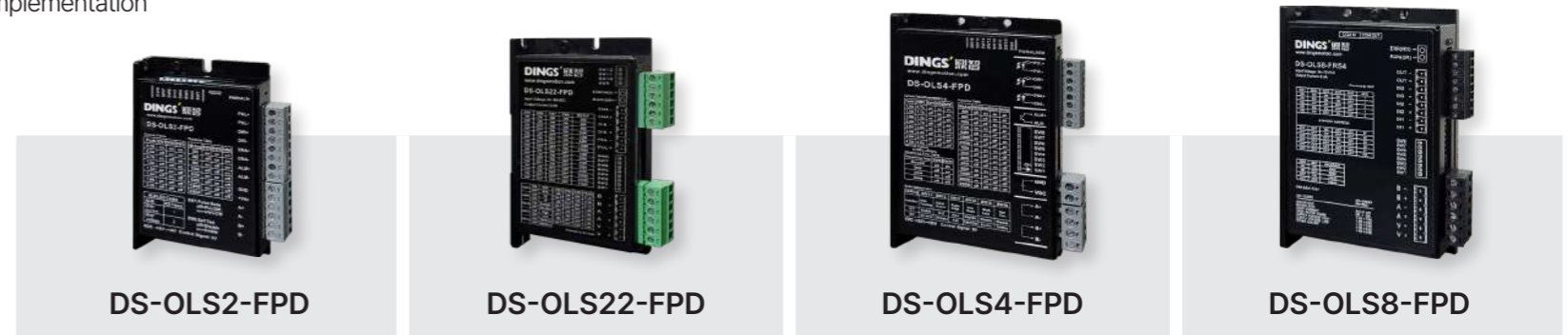
Integrated Stepper Electronics [OPEN LOOP type / CLOSED LOOP type]

BLDC · VCM Control Solutions

Jiangsu DINGS' Intelligent Control Technology Co., Ltd.



Pulse input type of Open Loop 2-Phase Step Motor Drive
Microstep resolution can be set through DIP switch setting
Output current can be set through DIP switch setting
Smooth filtering, Soft-Start function implementation
Protection alarm output



POWER SUPPLY	24 – 36 VDC	12 – 48 VDC	24 – 48 VDC	24 - 72 VDC
OUTPUT RATED CURRENT (max)	2.2 A	3.0 A	4.2 A	7.8 A
INTERFACE	Step & Direction (1 pulse) or CW / CCW (2 pulse)			
INPUT / OUTPUT SIGNAL	3 differential inputs 1 differential output	3 differential inputs	3 differential inputs 2 digital outputs	3 differential inputs 1 digital output
SIZE	86 × 55 × 20 mm	92.5 × 56 × 21 mm	118 × 75.5 × 25.5 mm	118 × 78 × 34 mm
WEIGHT	90g	96g	250g	300g

Pulse input type of Open Loop 5-Phase Step Motor Drive
Microstep resolution can be set through DIP switch setting
Output current can be set through DIP switch setting
Protection alarm output



POWER SUPPLY	24 - 36 VDC
OUTPUT RATED CURRENT (max)	2.4 A
INTERFACE	Step & Direction (1 pulse) or CW / CCW (2 pulse)
INPUT / OUTPUT SIGNAL	4 differential inputs 2 digital outputs
SIZE	85 × 56 × 21 mm
WEIGHT	96g

RS-485 communication type of Open Loop 2-Phase Step Motor Drive
Supporting up to 30 axes connection control through MODBUS-RTU protocol communication
Command mode selectable (PULSE / RS-485 communication)
Various parameters can be set through DINGS' Tuner Pro GUI
Supporting up to 102,400 microstep resolution
Various error detection functions



POWER SUPPLY	24 - 48 VDC	24 - 72 VDC
OUTPUT RATED CURRENT (max)	3.2 A	6.5 A
INTERFACE	PULSE (1/2 pulse) or RS-485 MODBUS-RTU	
INPUT / OUTPUT SIGNAL	2 differential inputs 1 digital output	3 differential inputs 1 digital output
SIZE	94 × 60 × 27 mm	118 × 78 × 34 mm
WEIGHT	175g	300g

Analog input type of Open Loop 2-Phase Step Motor Drive
Internal operation speed can be set through DIP switch setting



POWER SUPPLY	24 - 48 VDC
OUTPUT RATED CURRENT (max)	4.5 A
INTERFACE	Analog Speed Command
INPUT / OUTPUT SIGNAL	3 digital inputs 1 analog input (0 - 10 VDC)
SIZE	118 × 78 × 34 mm
WEIGHT	300g

Stand Alone Stepper Electronic CLOSED LOOP TYPE

- RS-485 communication type of Closed Loop 2-Phase Step Motor Drive
- Supporting up to 30 axes connection control through MODBUS-RTU protocol communication
- Various parameters can be set through DINGS' Tuner Pro GUI
- DS-CLS10-FRS4-1A
 - Supporting ABS Encoder (BiSS-C Type, Single-16bit / Multi-16bit)
- DS-CLS9-FRS4-01
 - Dedicated drive with Force Control Function
- Command mode selectable
 - PULSE / RS-485 communication



POWER SUPPLY	24 - 48 VDC	24 - 72 VDC	
OUTPUT RATED CURRENT (max)	4.5 A	6.0 A	6.5 A
INTERFACE	PULSE (1/2 pulse) or RS-485 MODBUS-RTU		
INPUT / OUTPUT SIGNAL	2 differential inputs 5 digital inputs 4 digital outputs 3 encoder signal inputs (differential) 3 encoder signal outputs (differential)	2 differential inputs 5 digital inputs 3 digital outputs 1 brake output 3 encoder signal inputs (differential) 3 encoder signal outputs (differential)	2 differential inputs 5 digital inputs 3 digital outputs 1 brake output
SIZE	134 × 77 × 34 mm	156 × 97 × 33.5 mm	
WEIGHT	350g	376g	500g

- PWM constant current bipolar micro-stepping drive
- Support CANopen / EtherCAT communication protocol
- Support control mode PP, PV, HM / PP, PV, HM, CSP, CSV
- Motor short circuit protection, under-voltage protection, over-voltage protection, over-current protection, etc.
- Exquisite design, low noise and low vibration
- Optically isolated inputs



POWER SUPPLY	24 - 48 VDC	
OUTPUT RATED CURRENT (max)	6.5 A	
INTERFACE	CANopen	EtherCAT
INPUT / OUTPUT SIGNAL	2 differential inputs 5 digital inputs 3 digital outputs 1 brake output 3 encoder signal inputs (differential) 3 encoder signal outputs (differential)	
SIZE	156 × 97 × 33.5 mm	
WEIGHT	500g	

RS-485 communication type of Closed Loop 2-Phase Step Motor Drive
 Supporting up to 30 axes connection control through MODBUS-RTU protocol communication
 Various parameters can be set through DINGS' Tuner Pro GUI
 DS-CLS10-FRS4-1A
 - Supporting ABS Encoder (BiSS-C Type, Single-16bit / Multi-16bit)
 DS-CLS9-FRS4-01
 - Dedicated drive with Force Control Function
 Command mode selectable
 - PULSE / RS-485 communication



POWER SUPPLY	24 – 48 VDC	24 – 72 VDC	
OUTPUT RATED CURRENT (max)	4.5 A	6.0 A	6.5 A
INTERFACE	PULSE (1/2 pulse) or RS-485 MODBUS-RTU		
INPUT / OUTPUT SIGNAL	2 differential inputs 5 digital inputs 4 digital outputs 3 encoder signal inputs (differential) 3 encoder signal outputs (differential)	2 differential inputs 5 digital inputs 3 digital outputs 1 brake output 3 encoder signal inputs (differential) 3 encoder signal outputs (differential)	2 differential inputs 5 digital inputs 3 digital outputs 1 brake output
SIZE	134 × 77 × 34 mm	156 × 97 × 33.5 mm	
WEIGHT	350g	376g	500g

PWM constant current bipolar micro-stepping drive
 Support CANopen / EtherCAT communication protocol
 Support control mode PP, PV, HM / PP, PV, HM, CSP, CSV
 Built-in protection: Short circuit, Under/Over voltage, Over current
 Exquisite design, low noise and low vibration
 Optically isolated inputs



POWER SUPPLY	24 - 48 VDC	
OUTPUT RATED CURRENT (max)	6.5 A	
INTERFACE	CANopen	EtherCAT
INPUT / OUTPUT SIGNAL	2 differential inputs 5 digital inputs 3 digital outputs 1 brake output 3 encoder signal inputs (differential) 3 encoder signal outputs (differential)	
SIZE	156 × 97 × 33.5 mm	
WEIGHT	500g	

Supports up to 2-axis control
 EtherCAT Support (PP, PV, HM, CSP, CSV)
 Built-in protection: Short circuit, Under/Over voltage, Over current
 Supports ABS encoder (BiSS-C type, 16-bit / 16-bit multi-turn)
 Exquisite design, low noise and low vibration
 Optically isolated inputs



POWER SUPPLY	24 – 48 VDC
OUTPUT RATED CURRENT (max)	6.5 A
INTERFACE	EtherCAT
INPUT / OUTPUT SIGNAL	4 digital inputs x 2 2 digital outputs x 2 1 brake output x 2
SIZE	156 × 97 × 34 mm
WEIGHT	500g

Stand Alone Stepper Electronic CLOSED LOOP TYPE

- Maximum support for 4-axes control
- Support EtherCAT communication protocol
- Support control mode PP, PV, PT, HM, CSP, CSV
- 2-/3-/5-Phase Open & Closed-Loop Steppers
- Built-in protection: Short circuit, Under/Over voltage, Over current
- Exquisite design, low noise and low vibration
- Optically isolated inputs



DS-CLS3-FETC-4I

POWER SUPPLY	24 – 36 VDC
OUTPUT RATED CURRENT (max)	3.0 A
INTERFACE	EtherCAT
INPUT / OUTPUT SIGNAL	3 digital inputs 2 digital outputs
SIZE	144 × 106 × 31 mm
WEIGHT	450g

BLDC · VCM Control Solutions

- RS-485 MODBUS-RTU BLDC & Voice Coil Motor Drives
- Over/Under Voltage, Overcurrent & Overtemperature Protection

BLDC type (DS-OLBD1-FRS4, DS-OLBD3-FRS4)

- Hall sensor-based FOC algorithm, PID speed-current dual-loop control
- Hall signal fault protection · Max. continuous current 6A / 10A

VCM type (DS-OLBV1-FRS4, DS-CLBV1-FRS4)

- DS-OLBV1 : 0-5V Analog Frequency Control
- DS-CLBV1 : Closed-loop position control · Analog feedback · Multi-step



[BLDC Control]
DS-OLBD1-FRS4



[BLDC Control]
DS-OLBD3-FRS4



[VCM Control]
DS-OLBV1-FRS4



[VCM Control]
DS-CLBV1-FRS4

POWER SUPPLY	12 – 48 VDC		18 - 52 VDC	24 - 48 VDC
OUTPUT RATED CURRENT (max)	6 A (Peak 18 A)	10 A (Peak 30 A)	6 A (Peak 18 A)	4.5 A
INTERFACE	RS-485 MODBUS-RTU / Analog speed input (0-5V)		RS-485 MODBUS-RTU / Analog frequency input	PULSE / RS-485 MODBUS-RTU / Analog position sensor input
INPUT / OUTPUT SIGNAL		3 digital inputs 2 digital outputs 1 analog input		7 digital inputs 4 digital outputs 1 analog input
SIZE	118 × 75.5 × 25.5 mm	118 × 77 × 34 mm	118 × 75.5 × 25.5 mm	134 × 77 × 34 mm
WEIGHT	200g	300g	300g	325g

Integrated Stepper Electronics OPEN LOOP TYPE

Integrated Open Loop 2-Phase Step Motor Drive

Supporting Pulse input, RS-485 MODBUS-RTU, CANopen

42mm general step motor, Hollow shaft motor and all DINGS' Linear actuators (E, N, C, K)

Various parameters can be set through DINGS' Tuner Pro GUI



DS-OL42-IPD/IRS4

DS-OL42-ICAO

POWER SUPPLY	24 – 36 VDC	
OUTPUT RATED CURRENT (max)	3.0 A	
INTERFACE	Pulse input RS-485 MODBUS-RTU	CANopen
INPUT / OUTPUT SIGNAL	2 differential inputs 2 digital inputs 1 digital output	4 digital inputs 1 digital output
SIZE	42.2 × 42.2 × 25.2 mm	
WEIGHT	60g	

Integrated Open Loop 2-Phase Step Motor Drive

Supporting Pulse input, RS-485 MODBUS-RTU, CANopen, Analog speed input

57mm general step motor, Hollow shaft motor and all DINGS' Linear actuators (E, N, C, K)

Various parameters can be set through DINGS' Tuner Pro GUI



DS-OL57-IPD/IRS4

DS-OL57-ICAO

DS-OL57-ISC

POWER SUPPLY	24 – 48 VDC		
OUTPUT RATED CURRENT (max)	5.6 A		
INTERFACE	Pulse input RS-485 MODBUS-RTU	CANopen	Analog speed command
INPUT / OUTPUT SIGNAL	2 differential inputs 2 digital inputs 1 digital output	4 digital inputs 1 digital output	3 digital inputs 1 analog input
SIZE	56.2 × 56.2 × 25.4 mm		

Integrated Stepper Electronics CLOSED LOOP TYPE

Integrated Closed Loop 2-Phase Step Motor Drive

Supporting RS-485 MODBUS-RTU

Applicable to general step motor and DINGS' External Type Linear Actuator

Total 4 origin methods including origin sensor, Z-phase output, limit sensor and torque origin

Various parameters can be set through dedicated Ezi-Motion GUI program

64 Position Table Functions



DS-CL28-IPD/IRS4

DS-CL28-SA

DS-CL42-SA

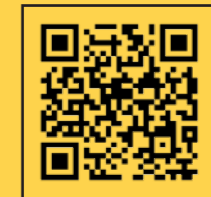
POWER SUPPLY	24 VDC		
OUTPUT RATED CURRENT (max)	1.5 A	1.0 A	1.2 A
INTERFACE	Pulse input RS-485 MODBUS-RTU	RS-485 MODBUS-RTU	
INPUT / OUTPUT SIGNAL	3 digital inputs 1 digital output	4 digital inputs	7 digital inputs 3 digital outputs



ENG Web



Partners Web



YouTube



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