

AS DUAL | ASD2448 Dual Motor Controller

2 BLDC Motor	6 I/O Config.	3.5 inch Display	Profinet TCP/IP Ethercat	24 V 240 Watt	48 V 300 Watt
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Intended Use

AS Dual motor controllers can be used to control AS motors and motor driven rollers but also other renowned brands in the market. The open concept allows for future changes on demand.

The controllers are commonly used to control BLDC motors in the field of:

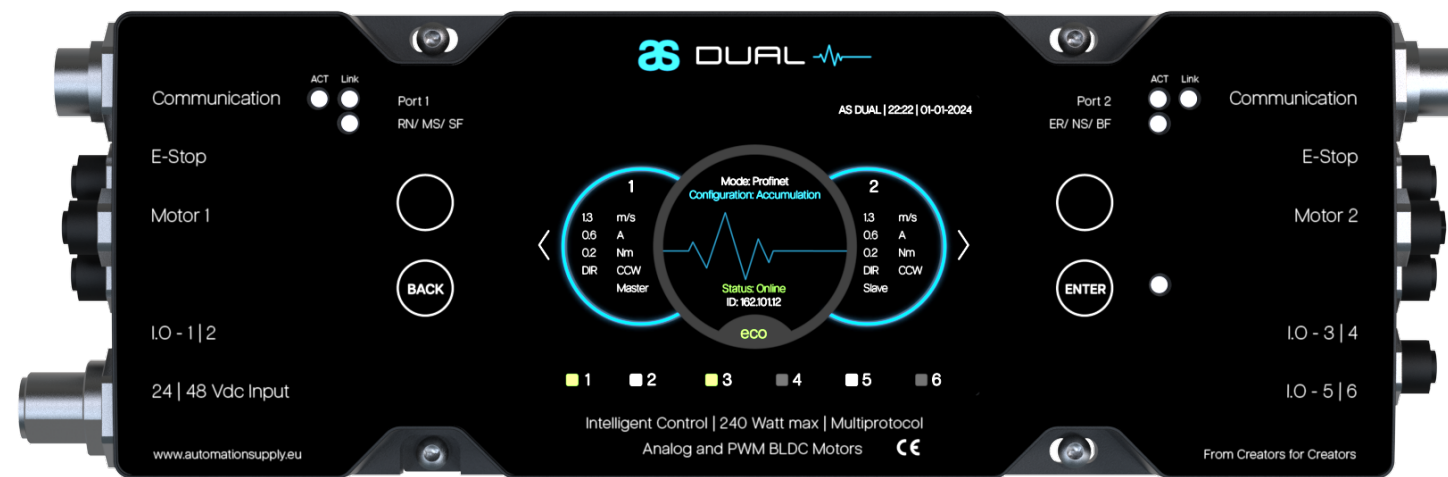
- Conveyor modules
- Sorter and Diverters
- Linear motion applications
- Peripheral controls & HMI devices

Designed for the future

The AS Dual in combination with AS motors and Motor driven rollers are designed to run according to the specified applications. It is possible to enter boost mode for higher demand applications that require higher starting torque.

Operational specifications and state of the art features.

- Eco, power and custom performance settings
- Interactive visual HMI
- Multi protocol onboard chip
- Preventive maintenance en advanced analytics



Scope of delivery

The scope of delivery defines the required components in order to create a working application, it is advised to consult our website for training material to choose what components you need for your application or what kits are available.

Information	Specifications	Details	
1 AS Dual Controller	2x motor 6x I/O 1x Power in 2x Emergency	240 Watt	Included
2 M12 4-pin T coded Cable	Male to Female (for power)	1500 mm	Not Included
3 M12 4-pin D coded Cable	Male to RJ-45 (for communication)	1500 mm	Not Included
4 I/O Splitter Cable	1x Snap in M8 2x Screw M12	150 mm	Not Included
5 3 pin Snap-in	2x M8 male	1500 mm	Not Included
6 AS MDR or External Motor	24V or 48V BLDC motors	50 Watt	Not Included
7 M12 4-pin D coded Cable	Male to Male (for communication)	1500 mm	Not Included
8 M8 5-pin	Male to Femal extension cable (for motor)	1500 mm	Not Included
9 24V or 48V Power Supply	24V 10A or 48V 10A Powersupply	240 Watt 24 V 480 Watt 48 V	Not Included

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Technical Specifications

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	24 VDC Input	48 VDC Input
Input voltage (Rated)	24 VDC 10A range 18 - 26 VDC	48VDC 6A range 42 - 52 VDC
Motor Outputs (Rated)	2x 24 VDC at 4 A	2x 48 VDC at 4 A
Starting Current	4.5A at 24 VDC	4.5A at 48 VDC
Power Consumption (Rated)	240 W	300 W
Motor Connector	M8 5-pin Snap-in [2x]	
I/O Connector	M8 4-pin Snap-in [3x]	
I/O Power	350 mA at 24 VDC	
Emergency Connector	M8 3-pin Snap-in [2x]	
Overvoltage Protection	+32 V at 24 VDC	+60 V at 48 VDC
Temperature Protection	> 90 C° shut down, resets after temperature falls below 90 C° and speed or power toggle.	
Motor Interfaces	PWM 12Khz 10 V (10 - 100%) Analog 0 -10 V (10 - 100%)	
Communication Interfaces	Profinet I/O ¹	
Certifications	CE ETL ²	
Ambient Temperature	Operation 0 to +40 C° Transport -20 to +80 C°	
Protection Rate	IP 54 IP65 (on request) ³	
Installation Altitude	Max +1000 m from sea level	
Dimensions LxWxH	210 x 79 x 32 mm	
Weight	360 grams	

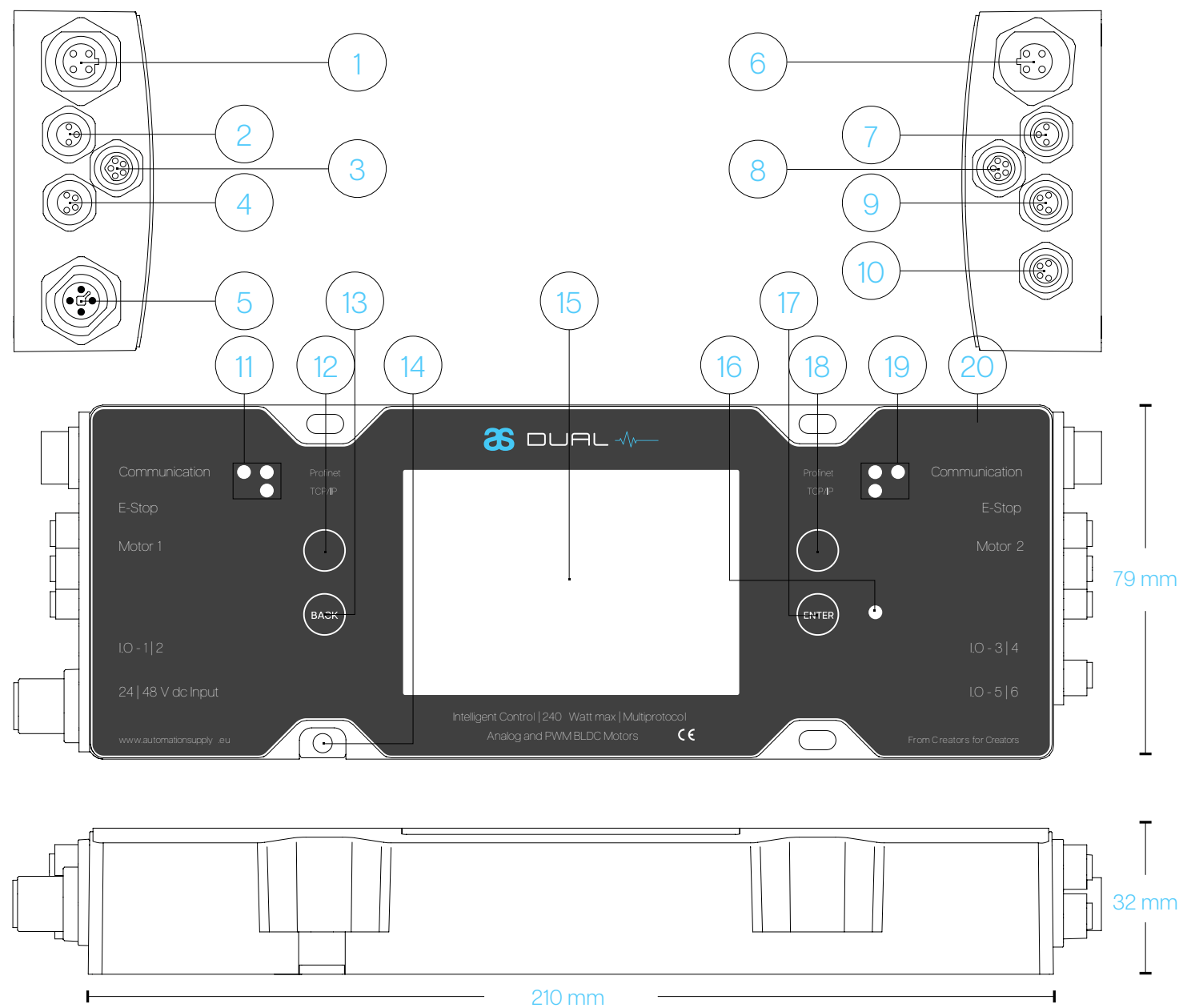
Additional information

1. Currently TCP/ IP | Profinet and I/O are available. We always improve our products, please contact us if EtherCAT and Ethernet IP are required for your project.
2. Contact us for information about applications in countries that require ETL listed components.
3. Please contact us if your application requires IP 65 protection rate, or other requirements.

Please visit our www.automationsupply.eu for the latest 3D CAD drawings and other technical data.

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Description		Description			
1	Communication A	M12 4P Female (D-coded)	11	Communication status A	LED
2	Emergency A	M8 3P Female (snap-in)	12	Multi purpose button A (Left or Up)	Button
3	Motor 1	M8 5P Female (snap-in)	13	Return button (BACK)	Button
4	Configurable I/O 1 2	M8 4P Female (snap-in)	14	Ground for PE (use knurled washer)	Safety
5	Power in 24 48 V	M12 4P Male (T-coded)	15	3.5 inch full color display	Graphic UI
6	Communication B	M12 4P Female (D-coded)	16	Power status	LED
7	Emergency B	M8 3P Female (snap-in)	17	Enter button (OK)	Button
8	Motor 2	M8 5P Female (snap-in)	18	Multi purpose button B (Right or Down)	Button
9	Configurable I/O 3 4	M8 4P Female (snap-in)	19	Communication status B	LED
10	Configurable I/O 5 6	M8 4P Female (snap-in)	20	Product Sticker	Adhesive Sticker

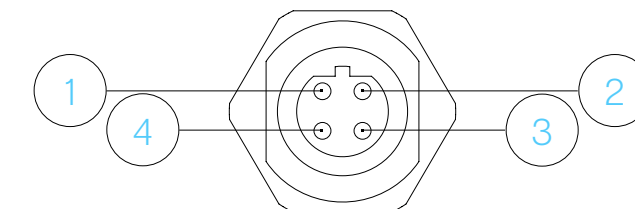
4.1 Connection Specifications

Communication Connector (female)

M12 4-pin D-coded



1. TD +
2. RD +
3. TD -
4. RD -

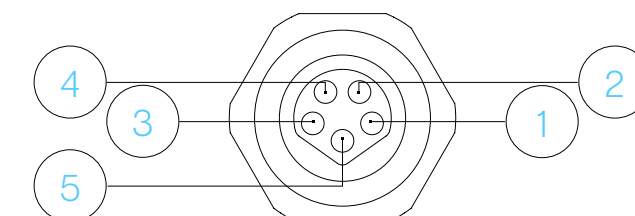


Motor Connector (female)

M8 5-pin snap in

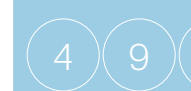


1. 24 VDC / 48 VDC
2. Direction (<4V: CCW / >7V: CW)
3. GND
4. Error/ Pulse
5. Speed

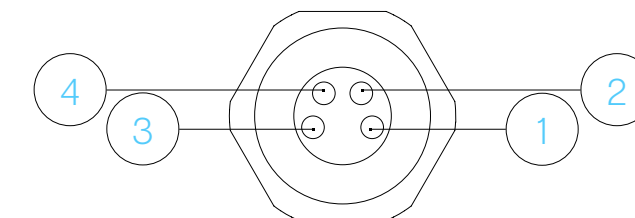


Configurable I/O Connector (female)

M8 4-pin snap in



1. 24 VDC
2. Sig 2
3. GND
4. Sig 1

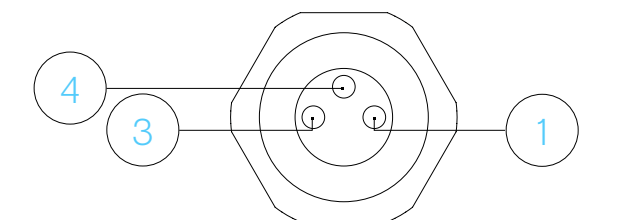


Emergency Connector (female)

M8 3-pin snap in



1. 24 VDC
2. Not Connected
3. GND
4. Sig 1

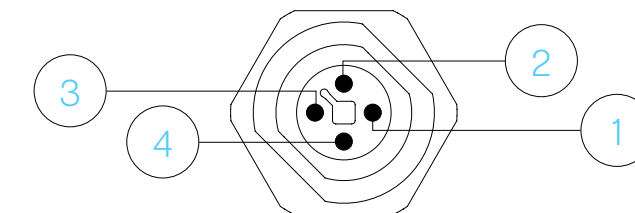


Power Connector (male)

M12 4-pin T-coded



1. 24 VDC / 48 VDC
2. Not Connected
3. Ground
4. PE

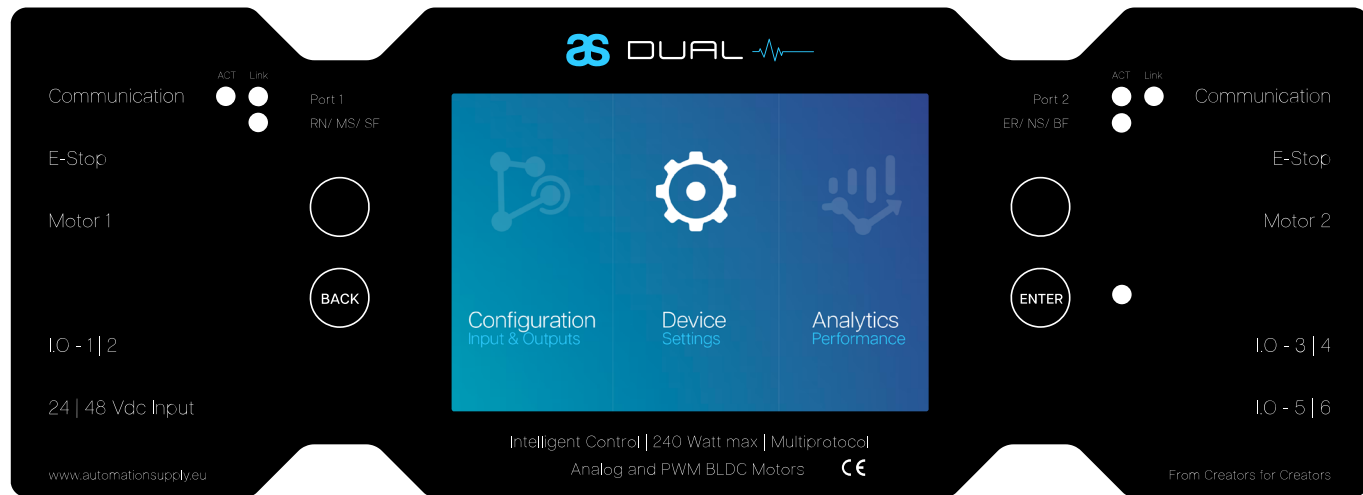


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User Interface

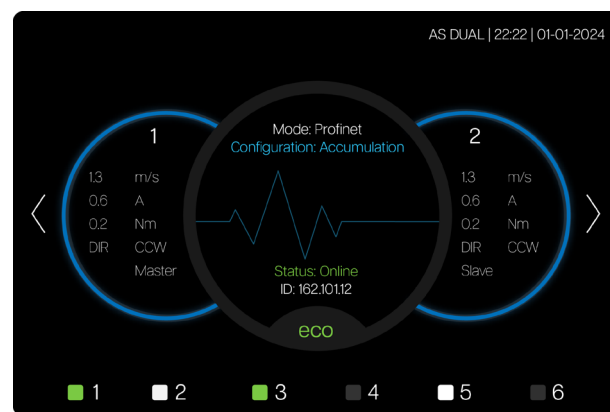
The AS DUAL Motor Controller has a intuitive user interface through which are functions of the controller can be accessed. Use the left and right button to navigate through the menu and click the enter button to enter the selected category and go a layer down into the menu. Click the back button to go one layer up in the menu.



Dashboard

The Dashboard contains an overview of the current motor and I/O parameters as well as communication status.

The intuitive design represents the future of automation showing real-time data and options for future feedback implementations.



Motor Configuration

The motor configuration allows users to set motor settings and configuration of 1 or more connected motors.

The configurations can help to achieve more performance, save energy and improve the workflow.

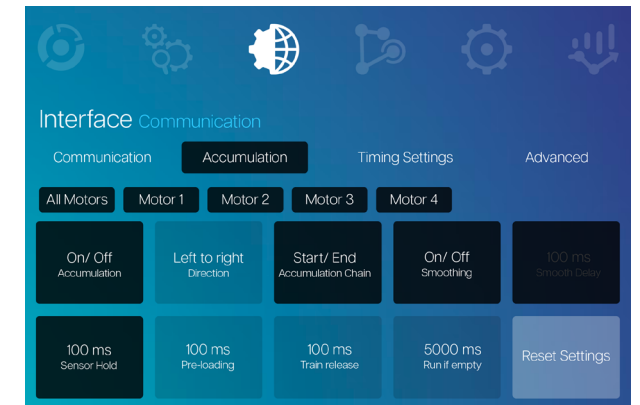


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Interface Communication

Interface Communication is used to set functions that require the use of multiple motors and controllers such as zero pressure accumulation.

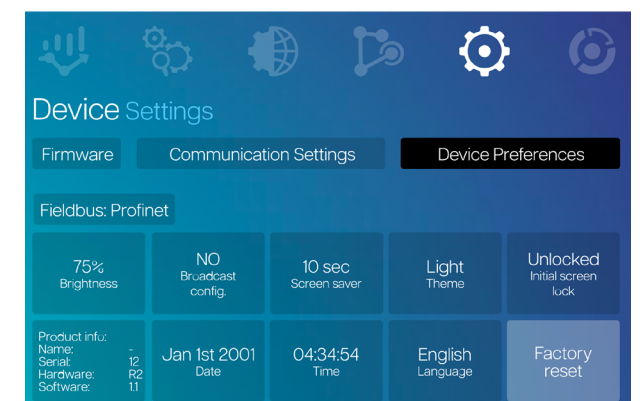
The communication protocol with the PLC can also be selected here.



Device Settings

In Device Settings the user can customize and check general device settings as well as do a factory reset to restore factory settings.

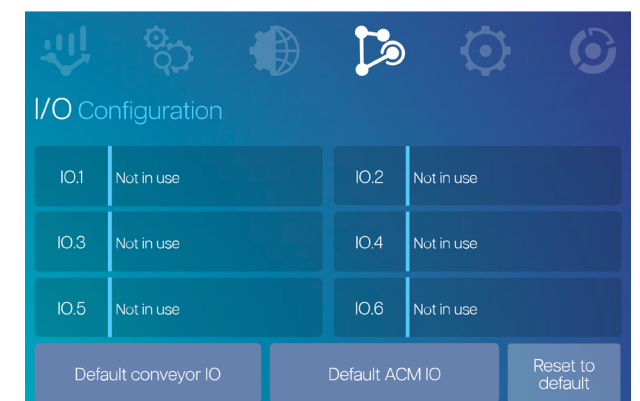
Whenever new firmware releases are uploaded to the controller these can be selected here as well.



Configuration Input & Outputs

In the configurations tab it is possible to set the required functionalities of the Configurable I/Os.

Depending on the chosen firmware different functionalities and configurations are accessible.



Analytics Performance

AS controllers keep track of the performance data of the controllers and connected motors and peripherals.

Warnings and how to resolve them can also be found in this menu



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- 3.5 inch Display
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- 24 V 240 Watt
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Example Applications: Portable Right Angle Sorter

The AS Dual Motor Controller can be used for almost any application in the field of automation and intralogistics.



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Required Components and Modules

	Information	Specifications
1	ASRA Right Angle Sorter	Sorts up to 1.240 Packages per hour @ 35 kg
2	ASBM Belt Module	Transport weights up to 35 kg @ 1.25 m/s
3	ASD2448 Dual motor controller	2x motor 6x I/O 1x Power in 2x Emergency

Disclaimer

AS and AS partners are not responsible for integration and usage of our products outside of the specified application range, technical specifications and in combination with third party components.

Images may differ from the actual product due to our continuous product improvement.



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