



## DATASHEET

ISP FDP6C2AMPP PN  
ISP C2AMPP-2C

## PROFINET IO Driver

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Photos non contractual



### Design :

The stepper motor driver set has a backpanel board ISP FDP6C2AMPP integrable on a 19" frame, height 3 U, depth 240 mm which can receive:

- 1 to 6 control boards, (width 10F), each one handling 2 motors and two encoders, inputs/outputs go no go automaton type.  
or 1 to 12 equivalent boards, (width 5F), each one handling 1 motor and one encoder
- A communication node PROFINET to CAN, (width 12F) ISP10A528FPI0040.
- A connexion board and electric interfaces, (width 6F).
- A LED default signaling board (width 6F).

The encoder can be incremental or absolute type (\*) with adjustable power supply.  
In case of incremental encoder, the input signal are quadrature signal 0-5v type.

(\*): The previous supply of a copy of each model of due encoder is recommended to ensure validation and interfaces adaptation to customer needs.

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Shift instructions are send through a PROFINET Network.

Full step or ½ step shift

- Adjustable speed up to 4kHz
- Trapezoidal profile ( adjustable acceleration and deceleration) or square (start/stop)
- Possibility to limit the backlash thanks to the movement limit on the same direction (collision)
- Homing on original cam or limit switch sensor
- Shift to limit switch and/or origin

A regulation on current, limiting the current by phase from 100mA to 2A, is implemented. This value is adjustable for each motor.

Errors feedback by PROFINET and display of the board state by signal on front.

Stop position of the associated motors and encoder, also the board parameter, are back up in case of power failure.

Firmwsare update, either by PROFINET or directly on board.

Two inputs and one go no go automatism output 24 Vdc by axis.  
The logical inputs are insulated by optocoupleur

For more details, please consult the Gateway datasheet PROFINET to CAN ISP10A528FPI0040.

### **Applications :**

Complex system of positioning composed of several stepper motor, controlled simultaneously, at long range by PROFINETand operating synergistically.



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#### Technical Specifications:

Characteristics (without option)	Values
Logic power supply	24VDC
Motors power supply	24VDC à 48VDC ( by separated supply )
Maximal intensity per motor	2A per phase
Encoder power supply	5V to 7V adjustable 250mA maximum
Dimensions	450mm x 3U x 210mm
Communication Connector Power supply Connector Logic power supply connector Motor connector (1 axis with E/S TOR) Encoder connector (1 axis)	RJ45 (Wiring cat 5 <sup>e</sup> or 6 compatible PROFINET) Phoenix contact MiniConnec Power série HC Phoenix contact MiniConnec Classic SUBD 15 female plug SUBD 15 male plug
TOR Inputs	24VDC Nominal Current : between 5 and 15mA Maximal Current : 30mA
TOR outputs	24VDC Maximal Current : 300mA Inrush current: 2A (length <10ms)
Reliability	Axis and encoder drive unit : 150 000 h Backpanel Profinet : 200 000 h

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