

DA 701F

Freelance hardware selector

The S700 I/O family can be used as direct I/O for AC 700F and AC 900F Freelance controllers or as PROFIBUS remote I/O with AC 700F, AC 900F, or other PROFIBUS Masters.

S700 I/O has a small footprint - the modules are featured with a high packing density, and several modules are available with inputs and outputs mixed in one module. These modules cover a wide variety of applications and give maximum flexibility. The S700 I/O is compliant with cULus and certified for installation in hazardous locations according to UL Class I, Division 2 (Groups A, B, C, and D).

The digital/analog I/O module DA 701F has 30 channels. The technical data correspond to the input and output values. The inputs and outputs are electrically isolated from the other electronic circuitry of the module. There is no potential separation between the channels.

Features and benefits

- 16 digital inputs, 24 V DC.
- 8 configurable digital inputs/outputs 24 V DC, 0.5 A max.
- 4 analog inputs, voltage, current, and RTD, resolution 12 bits plus sign.
- 2 analog outputs, voltage, and current, resolution 12 bits plus sign.
- as direct I/O and PROFIBUS I/O

General info	
Article number	3BDH000371R0005
Type	Digital/Analog Input/Output
Life cycle status	Active
Number of channels	30
Signal type	Digital/Analog Input/Output
HART	No
SOE	No
Redundancy	No
Mechanics	S700

Detailed data	
Resolution	Analog Input 13 bit, Analog Output 13 bit
Input voltage range, "0"	-30 V...+5 V
Input voltage range, "1"	+13 V...+30 V
Maximum field cable length	1000 m (shielded), 600m (unshielded)
Max input voltage (non destructive)	30 V
Common mode voltage input	24 VDC
Power dissipation	6 W
Current consumption +24 V external	0.15 A

Diagnostics	
Front LED's	40 LEDs for signals and error indication. One yellow LED per channel, the LED is ON when the input/output signal is high (signal 1).

Environment and certification	
CE mark	Yes
Electrical safety	EN 50178, IEC 61131-2, UL 61010-1, UL 61010-2-201
Hazardous Location	cULus Class 1 Div 2
Protection rating	IP20
Climatic operating conditions	Operation 0 ... +60 °C, Storage -40 ... +70 °C
RoHS compliance	Directive 2011/65/EU
WEEE compliance	DIRECTIVE/2012/19/EU

Dimensions	
Width	67.5 mm
Depth	76 mm
Height	54 mm
Weight	125 g

**solutions.abb/freelance
solutions.abb/controlsystems**

We reserve the right to make technical changes to the products or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not assume any responsibility for any errors or incomplete information in this document.

We reserve all rights to this document and the items and images it contains. The reproduction, disclosure to third parties or the use of the content of this document – including parts thereof – are prohibited without ABB's prior written permission.

Copyright© 2026 ABB All rights reserved