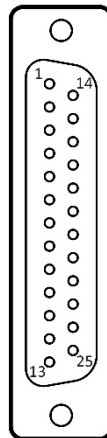


Pinout Information, Standard FC DB25F			
DSUB pin	Function	DSUB pin	Function
1	DO[1]	14	DO[9]
2	DO[2]	15	DO[10]
3	DO[3]	16	DO[11]
4	DO[4]	17	DO[12]
5	DO[5]	18	DO[13]
6	DO[6]	19	DO[14]
7	DO[7]	20	DO[15]
8	DO[8]	21	DO[16]
9	n/c	22	COM
10	n/c	23	COM
11	24V_SAFE	24	COM
12	24V_SAFE	25	COM
13	24V		



Description

The Sourcing Digital Output (DOU) slot card has 16 sourcing/PNP digital output channels. These channels are active high, i.e. when a channel is commanded to logical TRUE, the associated output is driven high. The output voltage level is determined by the voltage source connected to the card, which is typically 24V and can range from 12V to 24V. The maximum output current per channel is 0.5A with a total output current for the card of 4A across all 16 channels. Each channel is protected against short circuits and general overloads. Inductive loads can be directly driven. See specification table for inductive protection details. A flyback diode is required when switching inductive loads.

This card is certified as suitable to be used in SIL3 rated functional safety systems and provides readbacks on each output's actual state. These readbacks are checked internally by the Fusion.IO system to determine when faults have occurred. The readback states can also be read via EtherCAT.

Each DOU channel can also be configured to function as a SIL3 rated sinking Digital input using DDI's Interlock Builder configuration utility.

Specifications

Electrical	
Slot Card Type	Digital Out
No. of channels	16
Output Type	Sourcing
Max Output Current (per channel)	0.5A
Max Total Current Output (all channels)	4A
Max leakage current (output OFF)	1 uA
Max voltage drop (single channel, 0.5A)	0.8V
Max short circuit current	1.5A
Max switched inductive load energy	100 mJ, single pulse
Max Rise Time (100mA, 100 Hz)	< 200 μS
Max Fall Time (100mA, 100 Hz)	< 200 μS
Default Output State at Power-up (all channels)	OFF
Power Consumption (all channels off)	0.05W
Output Update Rate	8 kHz

Protection

Over-current / Short Circuit	Yes. With auto-restart
Thermal Shutdown	Yes. With auto-restart

Mechanical

Dimensions	98 x 45 mm
Weight	21 g

Environmental

Operating temp	0°C to 55°C
Storage temp	-40°C to 85°C
Relative Humidity, operating	10% to 90%, non-condensing

Certifications and Standards

Complies with the requirements of the relevant standards:
Cat 3 /PL e according to ISO 13849-1
SIL CL3 /SIL 3 according to IEC 62061 / IEC 61508

