

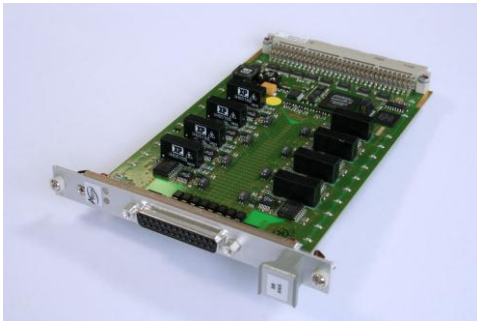
Analogic Outputs (x8) optically isolated

Ref: 5055-0608-1

Ref: 5055-0608-2

Arion-IO
Technical
specification

Features



- 8 analog outputs (separated in 4 groups on the board)
- Differential or non-differential outputs
- Noise protection: 50dB
- Two versions of the board:

	Analog	Analog - E
Reference	5055-0608-1	5055-0608-2
Max. output current	30 mA	30 mA
Range	0V to 5V -5V to +5V -10V to +10V	0V to 6V -6V to +6V -12V to +12V

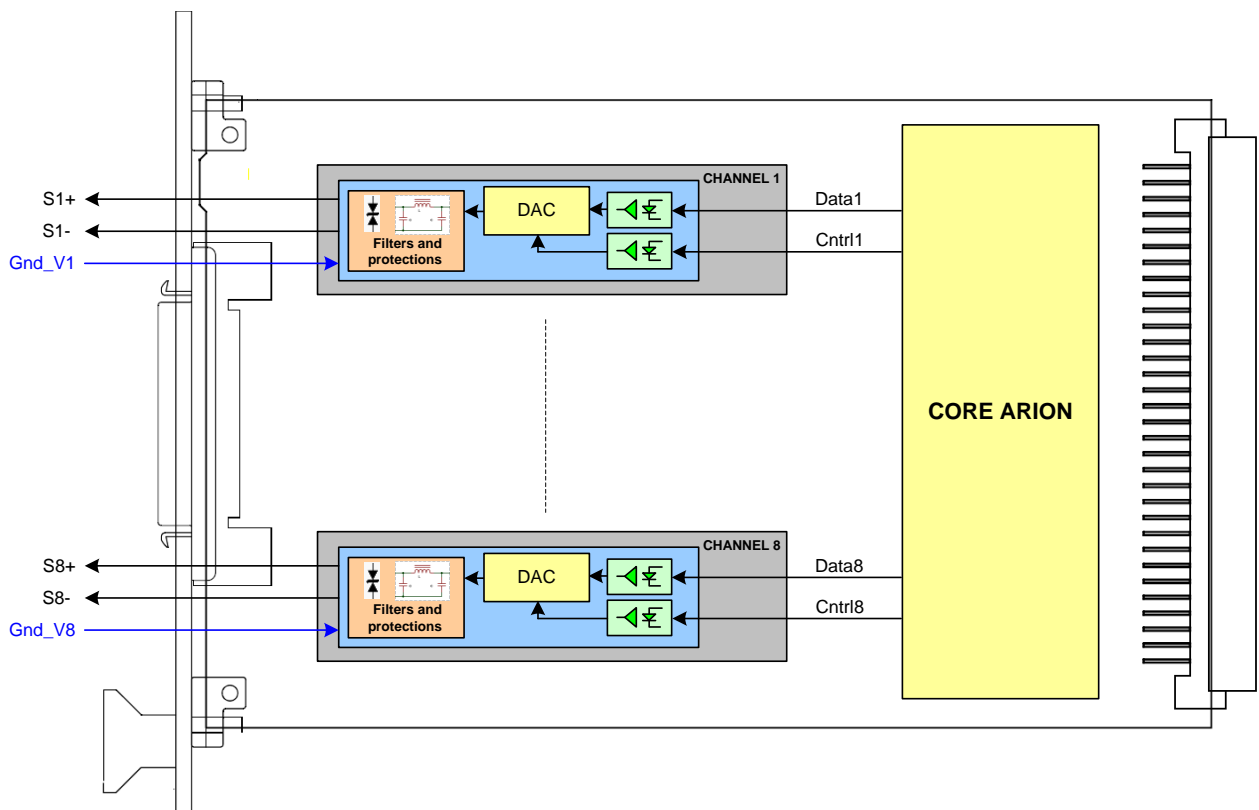


- Optically isolated: provides a direct connection to industrial equipments
- Common mode transient immunity of 100V/μs
- All outputs are protected from transient voltage spikes, short-circuits and overvoltage

Physical and environmental condition

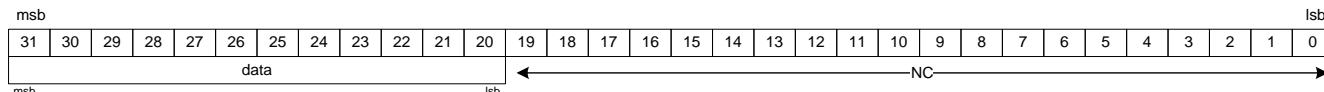
Dimensions:	3U format (length 160mm) x 3T
Temperature:	Industrial range temperature -40°C / +85°C
Weight:	300g
Consumption:	700mA for analogical 5V line and 100mA for numerical 3.3V line

Block diagram



Data coding:

The output is set on 11 bits if the voltage range is positive otherwise it set on 12 bits. It is coded in two's complement binary.



$$\text{lsb value} = \Delta V / 2^n$$

$$\text{data} = V_{\text{out}} / \text{lsb value}$$

	Mode	ΔV	n	lsb value
ANA	0V to 5V	5V	11	2.44mV
	0V to 10V	10V	11	4.88mV
	-5V to +5V	10V	12	2.44mV
	-10V to +10V	20V	12	4.88mV
ANA-E	0V to 6V	6V	11	2.93mV
	0V to 12V	12V	11	5.86mV
	-6V to +6V	12V	12	2.93mV
	-12V to +12V	24V	12	5.86mV

Arion operating modes

Regarding the data of Arion-IO boards, three operating modes are available.

These 3 modes can ONLY be used in 'Global Channel'; See Configuration documentation for more information.

1. Cyclic mode: default mode

On cyclic trigger, the data are set to the outputs of the board.

Remark: The cyclic trigger is created by a configurable timer. This timer is set during the configuration step.

2. Up-Sampled mode: this mode works like cyclic mode but with N samples.

On cyclic trigger, a sub-cycle is defined to set N data samples to the outputs of the board.

Remark: The N number of samples has to be defined during the configuration step.

3. On demand: this mode is only available on Output Boards.

The data are set to the outputs of the board when the user writes data.

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