

Features



- 8 analog inputs (separated in 4 groups on the board)
- Differential or non-differential inputs
- Two versions of the board:

	Analog	Analog - E
Reference	5054-0608-1	5054-0608-2
Max. input current	34 μ A	35 μ A
Accuracy	12bits \pm 1LSB	12bits \pm 1LSB
Range	0V to 5V 0V to 10V -5V to +5V -10V to +10V	0V to 6V 0V to 12V -6V to +6V -12V to +12V

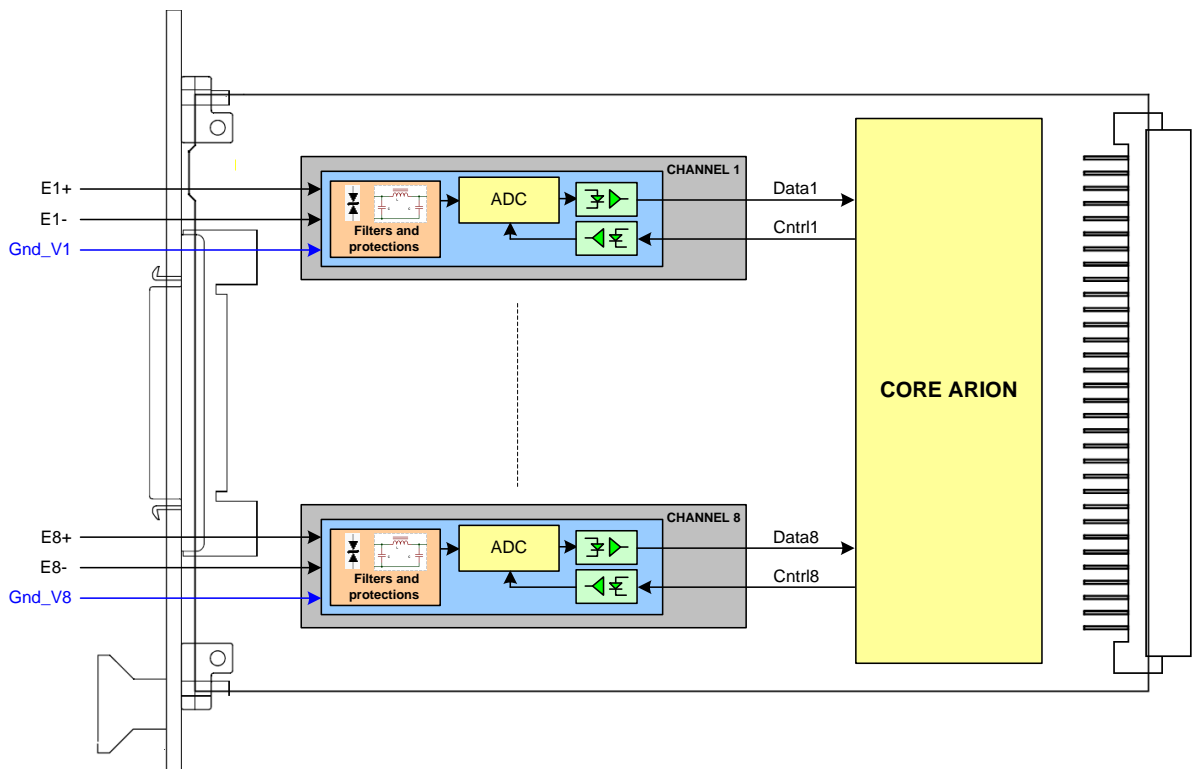


- Optically isolated: provides a direct connection to industrial equipments
- Common mode transient immunity of 100V/ μ s
- All outputs are protected from transient voltage spikes, short-circuits and overvoltage

Physical and environmental condition

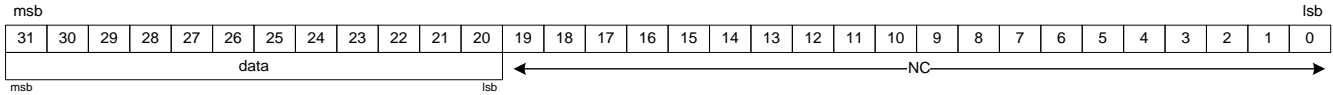
Dimensions:	3U format (length 160mm) x 3T
Temperature:	Industrial range temperature -40°C / +85°C
Weight:	300g
Consumption:	700mA for analogical 5V line and 100mA for numerical 3.3V line

Block diagram



Data coding:

Two's complement binary on 12 bits.



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

$$\text{data} = \text{Vin} / \text{lsb value}$$

	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 acquisition of Arion-IO boards, 2 operating modes are available.
 These 2 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 acquired from the inputs 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 acquire N data samples from the inputs of the board.

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