

## Features



- 32 numeric inputs (separated in 4 groups on the board)
- Four versions of the board:

	Low impedance Low voltage	Low impedance High voltage	High impedance Low voltage	High impedance High voltage
Reference	5050-0608-1-BT	5050-0608-1-HT	5051-0608-1-BT	5051-0608-1-HT
Low level	0V to 0,8V	0V to 1V	0V to 0,8V	0V to 1V
High level	3V to 6,5V	10V to 60V	3V to 6,5V	10V to 60V
Inom	5mA	5mA	500µA	500µA
Fmax	100KHz	100KHz	100KHz	100KHz

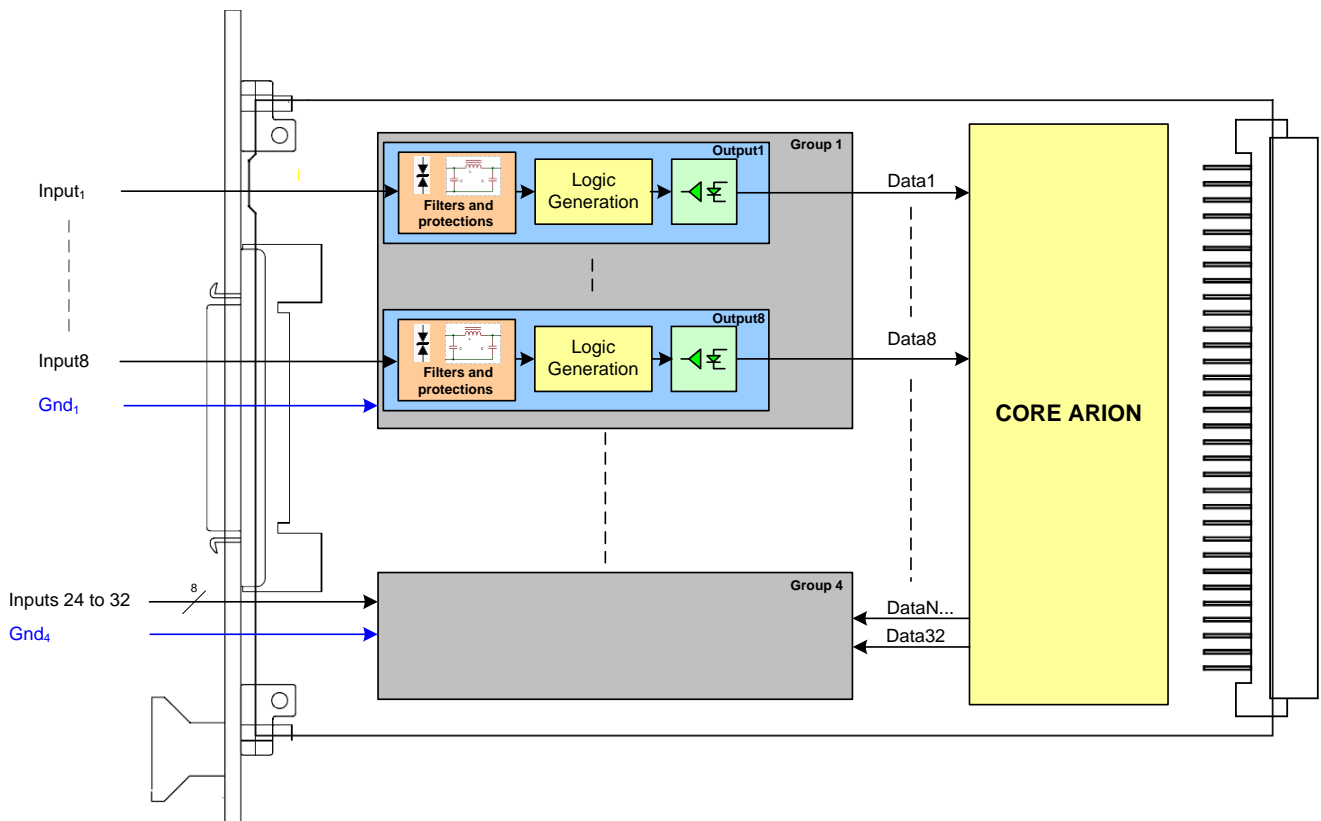
- Optically isolated: provides a direct connection to industrial equipments
- Common mode transient immunity of 100V/µs
- All outputs are protected from transient voltage spikes, short-circuits and overvoltage



## Physical and environmental condition

Dimensions: 3U format (length 160mm) x 3T  
 Temperature: Industrial range temperature -40°C / +85°C  
 Weight: 300g  
 Consumption: 200mA for analogical 5V line and 300mA for numerical 3.3V line

## Block diagram



Remark: Each channel of a group shares the same ground but is isolated from the other groups.

**Data coding:**

msb															lsb																	
31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	
in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in	in
31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	

**Arion operating modes**

Regarding the data acquisition 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 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.*

**3. Event: this mode is only available on Numeric Input Boards.**

When the values of the inputs change, the data are acquired and available on the system.

*Remark: A filter on the inputs can be set during the configuration step.*