

Digital Outputs (x32) optically isolated

Ref: 5052-0608-1

**Arion-IO
Technical
specification**

Features



- 32 digital outputs (separated in 4 groups on the board)
- I_{max} output = 1mA
- Open collector mode : I_{max} input = 140mA
- Voltage ranges:

Mode	Low Level	High Level	External supply
TTL	0V to 0.4V	2.4V to 5V	no
Tension	0V to 1V	2V to 60V	yes
Current	0V to 1V	2V to 60V	yes
Inverted Current	2V to 60V	0V to 1V	yes

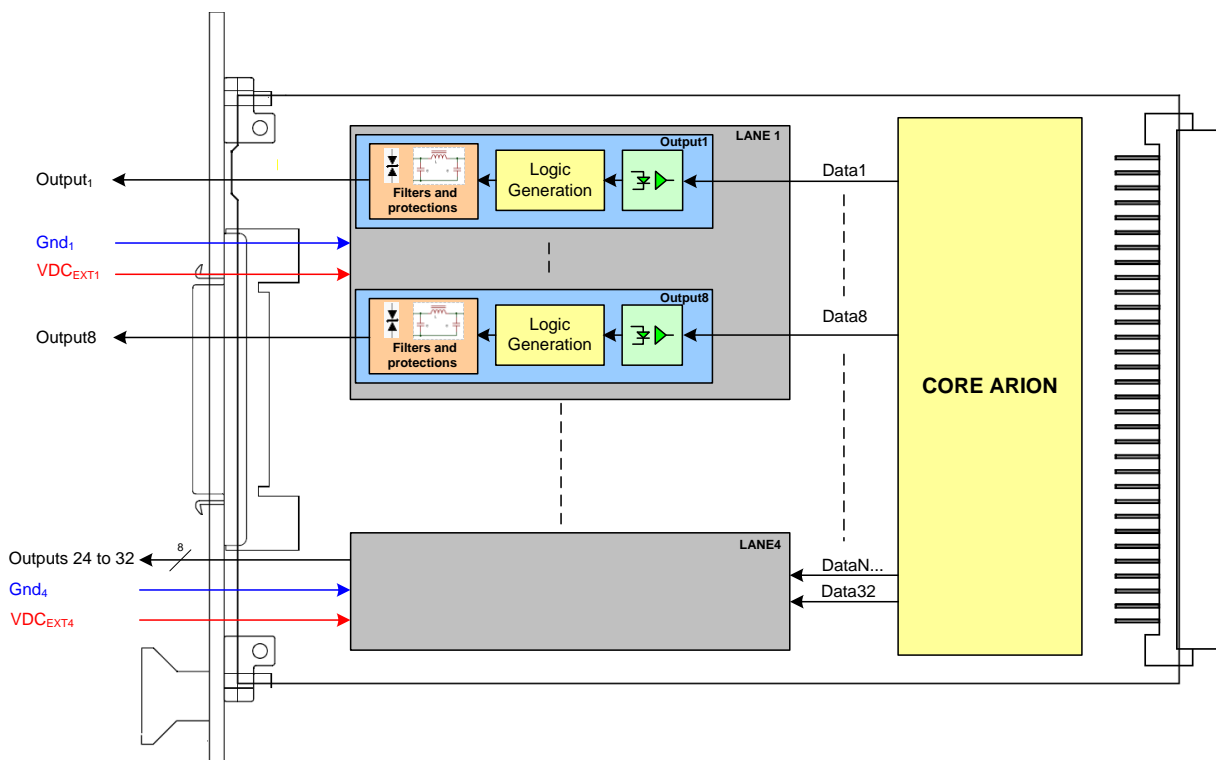
- Optically isolated: provides a direct connection to industrial equipments
- Common mode transient immunity of 100V/μs
- All outputs are protected from transient voltage spikes, short-circuits and overvoltage



Physical and environmental condition

Dimensions: 3U format (length 160mm) x 3T
 Temperature: Industrial range temperature -40°C / +85°C
 Weight: 300g
 Consumption: 450mA for analogical 5V line and 300mA for numerical 3.3V line

Block diagram



Remark: The 32 outputs are created by 4 different Group. Each output of a Group shares the same ground but is isolated from other Group.

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	
out	out	out	out	out	out	out	out	out	out	out	out	out	out	out	out	out	out	out	out	out	out	out	out	out	out	out	out	out	out	out	out	out
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 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 output 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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