Frequency Inputs (x12) optically isolated
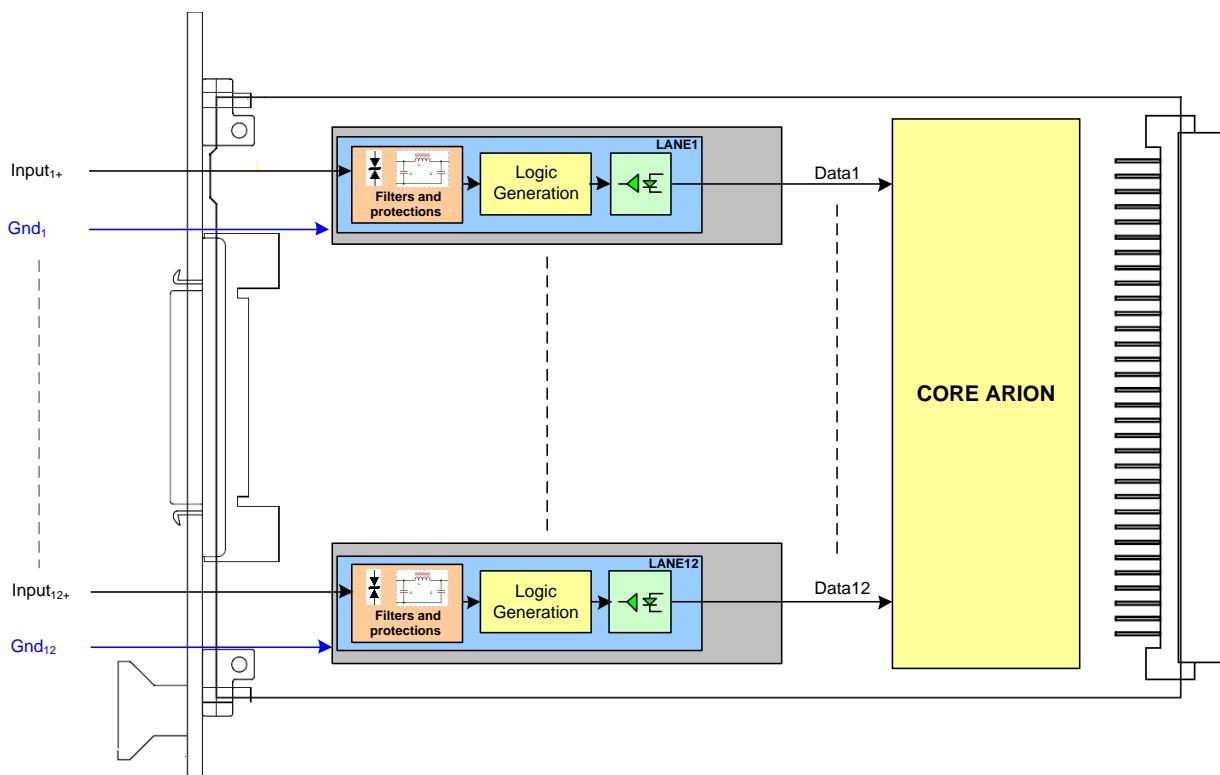## Ref: 5085-0608-1

Features

- 12 inputs for frequency measurement

- Frequency range: 0,1Hz to 1MHz

- Period measurement error max: ± 0.2%

- Trigger level: 1V

- Maximum input voltage: 60V

- Maximum input current: 4.5mA

- Time stability: Result is delivered by a 16 period averaging

- Optically isolated: provides a direct connection to industrial equipments

- Common mode transient immunity of 100V/µs

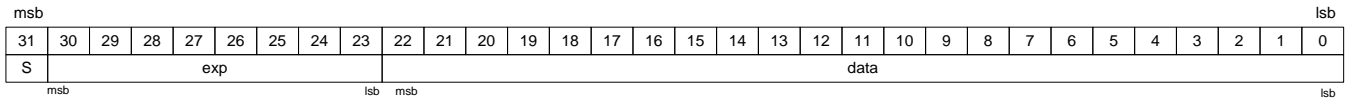- All outputs are protected from transient voltage spikes, short-circuits and overvoltage

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

Data coding: 32 bits float data (IEEE754).

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
S	exp								data																						

msb (under 30) ... lsb (under 23) msb (under 22) ... lsb (under 0)

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.