

AR - 4IN LIGHT/LIGHT+

Four analogue Inputs to CAN bus module



Electrics:

Supply voltage:	5.5V to 16V	(can be powered at 5V with radiometric sensor)
Supply current:	15mA	(sensors consumption not included)
Sensor supply:	5V +/-2%	(common for all input and internal electronic)
Sensor current max:	50mA overall	
Measuring range:	0 to 5V	
ADC resolution:	12bits	
Input impedance:	>500kOhm	
Input lowpass filter:	1600Hz (-3db)	

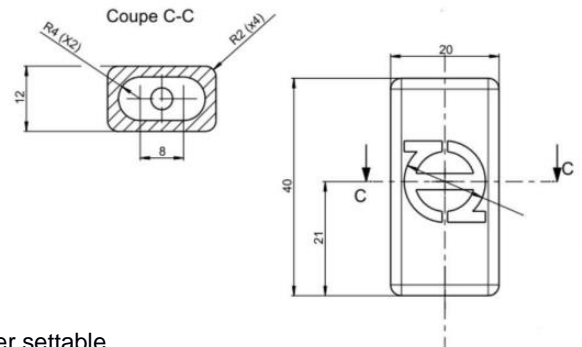
	In 1	In 2	In 3	In 4
Aux Supply(*)	Purple	Purple	Purple	Purple
5V	Red	Red	Red	Red
Signal	White	Yellow	Green	Blue
Gnd	Black	Black	Black	Black

Supply CAN	
Pwr Supply	Purple
Gnd	Black
CAN H	White
CAN L	Blue

* On 4IN LIGHT+ only

Mechanics

Size:	44x18x10mm without cables
Cables:	KU 22AWG
Wiring sleeve:	DR-25
Enclosure:	PVC oil and fuel resist.
Protection:	IP67 (filled with epoxy resin)
Operating temp.:	-20 to 80°C
Weight:	30g



Functionalities

CAN:	2.0A and 2.0B
Termination:	Open
CAN baud rate:	Settable (1M, 500k, 250k, 125k)
IDs:	One message ID for each input, user settable. (!!! Extended IDs 0x00000010 and 0x00000011 are reserved)
Format:	Big or Little endian (Settable)
Messages Rate:	Individually and user settable up to 1kHz
Messages content:	mV (1st word) and load resistance (2nd word) for CTN and PT1000 In "All In One" mode, the fourth input selected values are sent on the same message

Miscellaneous

Internal 1k21 pull-up (for CTN or PT1000) switchable (manual or automatic)
 CTN or PT1000 must be connected between signal and ground.
 In case of automatic pull up management, take care that the powered sensor used have a measurement range >50mV up to 5000mV. Also, all powered sensor must be plugged with 4IN switched off (hot plug not allowed).

Can Protocol

Normal mode Message

Word1	Word2	Word3	Word4
Input Voltage (mV)	Sensor resistance (Ohm)	Reserved	Reserved

"All In One" mode Message

Word1	Word2	Word3	Word4
Input1 voltage (mV)	Input2 voltage (mV)	Input3 voltage (mV)	Input4 voltage (mV)

Sensor type this active pull up commutation. Self-Management will set the pull up on if input voltage is less than 50mV when 4IN is powered.

PLEASE SPECIFY OPTIONS DURING ORDER