

QUAD - Analog/Digital Sensor ZN1IO-4IAD

Technical Documentation

FEATURES

- Four A/D inputs can be configured as followed:
 - o Binary inputs (switch sensor, push button).
 - o Temperature probe.
 - o Motion sensor.
- Reduced size: 45 x 45 x 14mm.
- No external supply required different from bus.
- Can be mounted within distribution boxes, junction boxes, wall back boxes or DIN rail.
- KNX BCU integrated.
- Total data saving on loss of power supply.
- CE directives compliant.

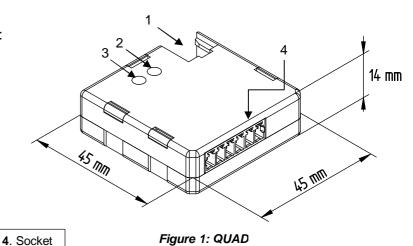


Figure 1: QUAD

1. KNX bus	2 . LED	3.Programming button

Programming button: short button press to set the programming mode. If this button is held while plugging the device into the KNX bus, it goes into safe mode.

LED: programming mode indicator (red). When the device goes into safe mode, it blinks (red) every half second.

GENERAL S	PECIFICATIONS			
CONCEPT		DESCRIPTION		
Device type		Electric operation control device		
Operation voltage (typical)		29VDC SELV		
KNX supply	Voltage range		2131V DC	
	Maximum consumption	Voltage	mA	mW
		29VDC (typical)	8.3	240
		24VDC	10	240
	Connection type		Typical bus connector TP1, 0.50 mm² section	
Main supply		No		
Ambient temperature		-5 °C to +45 °C		
Storage temperature		-20 °C to +70 °C		
Ambient humidity		5 to 95% RH (no condensation)		
Storage humidity (relative)		5 to 95% RH (no condensation)		
Complementary characteristics		Class B		
Safety class		III		
Operation type		Continuous operation		
Device action type		Type I		
Electrical solicitations period		Long		
Protection class		IP 20, clean environment		
Assembly		Independent device can be mounted within distribution boxes, junction boxes, wall back boxes or DIN rail.		
Response to bus voltage failure		Data saving		
Operation indicator		Programming LED ON (red) when pushing the programming button		
Weight			60 gr.	
PCB CTI index		175 V		
Enclosure		PC FR V0 halogen free		

Further information www.zennio.com

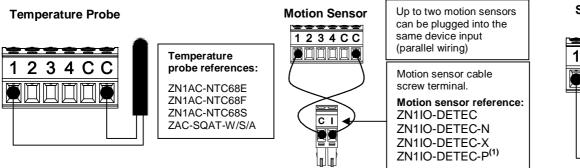


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INPUT SPECIFICATIONS AND CONNECTIONS		
CONCEPT	DESCRIPTION	
Number of inputs	4	
Isolation method	Opto-coupler	
Input voltage	+5V DC for the common	
Input current	3 mA / 4.75V DC (each input)	
Input impedance	Aprox. 3.3kΩ	
Switch type	Dry voltage contacts between input and common	
Connection type	Cable screw terminal and matching socket	
NTC probe length	1.5m. (up to 30m.)	
NTC accuracy (@ 25°C)	0.5°C	
Temperature measure precision	0.1°C	
Max cable length	30m.	
Cable section	0.15 mm ² to 1 mm ²	
Response time	Max. 10 ms	

Any combination of the next accessories is allowed in the inputs:



Switch/Sensor/ Push button

1 2 3 4 C C

(1) The micro switch number 2 in the ZN1IO-DETEC-P must be in Type A position to work properly.

INSTALLATION ON DIN RAIL

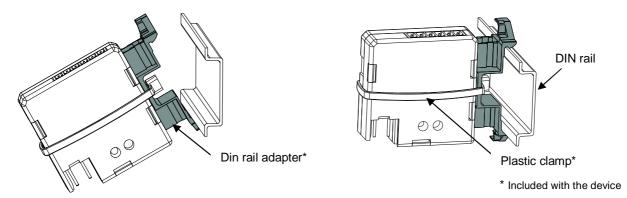


Figure 2: Attaching QUAD to DIN rail

SAFETY INSTRUCTIONS



- Do not connect main voltage (230 V) or any other external voltages to any point of the bus.
 Connecting an external voltage might put the entire KNX system at risk.
- Once installed, the device must not be accessible from the outside.
- Installation should only be performed by qualified electricians following applicable regulations on preventing accidents, as required by law.
- Keep away from water. If this product comes into contact with water or any other liquid, unplug immediately.



The WEEE logo means that this device contains electronic parts and it must be discarded properly following the instructions of http://zennio.com/weee-regulation.