

X-DIAS Multi I/O Module XIO 341



with 1x LED output 0-20 mA
2x LED output 0-350 mA
1x LED output 0-1 A
3x analog input 0-5 V with +5 V supply

The X-DIAS Multi I/O Module XIO 341 has 4 LED outputs in a range of 0-1 A.
The module also has three analog inputs from 0-5 V with an own +5 V sensor supply.
The external +24 V supply is monitored for undervoltage.

LED Outputs Specifications

Number	4
LED output 1	0-20 mA at max. +10 V LED forward bias
Resolution LED output 1	8-bit
LED output 2	0-350 mA at max. +12 V LED forward bias up to 50 °C ambient temperature 0-245 mA at max. +12 V LED forward bias up to 55 °C ambient temperature
Resolution LED output 2	8-bit
LED output 3	0-350 mA at max. +12 V LED forward bias up to 50 °C ambient temperature 0-245 mA at max. +12 V LED forward bias up to 55 °C ambient temperature
Resolution LED output 3	8-bit
LED output 4	0-1000 mA at max. +18 V LED forward bias up to 50 °C ambient temperature 0-700 mA at max. +18 V LED forward bias up to 55 °C ambient temperature
Resolution LED output 4	8-bit

Analog Input Specifications

Number of channels	3	
Measurement range	0 ... +5 V	0 ... 100 %
Measurement value	0 ... 5,000	0 ... 10,000
	with an open input, the firmware returns the positive maximum value and a status bit to indicate a cable break (HW class shows the value -2147483632)	
Input type	single ended (absolute)	single ended (relative)
Resolution	12-bit (ca. 1.3 mV/LSB)	
Conversion time for all channels	1 ms	
Input resistance	> 1 MΩ	
Cable break monitor	yes	
Input filter hardware	typically 1 kHz, 3 rd order low pass	
Input filter software	configurable, 1 st order low-pass	
Measurement precision	±0.50 % of the maximum measured value	

Supply Output Analog Inputs Specifications

Number of channels	1
Output voltage	+5 V
Permissible output current	maximum 60 mA
Permissible capacitive load	maximum 100 nF
Short-circuit proof	yes
Accuracy	±0.5 %

Electrical Requirements

Voltage supply from S-DIAS bus	+24 V DC ±20 % (SELV/PELV) UL: NEC Class 2	
Protection class	III	
Current consumption on the S-DIAS bus (+24 V supply)	typically 26.5 mA	maximum 33 mA
Supply for I/Os	+24 V ±20 %	
Current consumption I/O supply	load-dependent (max. 1.45 A at full load of the LED outputs)	

Voltage Monitoring

Supply voltage +24 V	supply voltage > 19.2 V (DC OK - LED lights up green)
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Article Number and Miscellaneous

	Article number	21-013-341	
	Dimensions	12.5 x 101.8 x 62.7 mm (W x H x D)	
	Printed circuit board coating	no	
	Approvals	CE	yes
		UL	designed according to UL
		Functional Safety	no
		UKCA	no

Environmental Conditions

Storage temperature	-40 ... +85 °C	
Environmental temperature	-25 ... +55 °C	
Humidity	0-95 %, non-condensing	
Installation altitude above sea level	0-2000 m m without derating > 2000 m up to a maximum of 5000 m with derating of the maximum environmental temperature by 0.5 °C per 100 m	
Operating conditions	pollution degree 2	
Noise emission	≤ 70 dB	
EMC resistance	EN 61000-6-2 (industrial area)	
EMC noise generation	EN 61000-6-4 (industrial area)	
Vibration resistance	EN 60068-2-6	3.5 mm von 5-8.4 Hz 1 g von 8.4-150 Hz
Shock resistance	EN 60068-2-27	15 g (147.15 m/s²)
Protection type	EN 60529/NEMA 250	IP20/Type1

Notes