



NEXTuino CREST CORE

Industrial Programmable Logic Controller

- 21 Digital Inputs (16 a/d + 5 fix d)
- 24 Digital Outputs · 16 Relay Outputs
- Ethernet · USB-B · RS485 (no pin header)
- DIN-rail 107x90x62 mm · 370 g

PARAMETER	COND.	VALUE / SPECIFICATION
GENERAL		
Standard		EN61010-1 / EN61010-2-201 / EN61131-2
Dimensions (W x H x D)		107x90x62mm / Weight / 370g / Mounting
Top hat rail EN50022, 35mm		
ENVIRONMENTAL CONDITIONS		
Operating ambient temperature		0°C – 55°C
Relative humidity – non-condensing		80 % for temp. up to 31 °C,
decreasing linearly to 50 %		
relative humidity at 55 °C		Pollution Degree / PD2 / Altitude
up to 2000m AMSL		
Vibration (5 f 9 Hz)		1,75 mm amplitude sinus / 3,5 mm amplitude random
Vibration (9 f 150 Hz)		0,5 g acceleration sinus / 1,0 g acceleration random
Transport and Storage		-20°C – +70°C / 10 to 90% no condensation
Altitude 3000m AMSL		Shock response / 15g, 11ms half sinus all 3 axes
I/O		
Supply voltage		12V or 24V
USB (Power for programming only)		USB-B, 2.0 / Ethernet
RJ45, 10/100Mbps		
RS485 (no termination inside)		250kb
Inputs, no galvanic insulation		21
Common analog/digital		16
Fixed digital, ext. Interrupt usable		5
Digital Outputs, no galvanic insulation		24
Relay Outputs, galvanic insulation		16
TERMINAL CAPACITIES		
Relay Output, Power Input		2,5mm ² (24-12AWG) / Strip length / 6-7mm
Max. tightening torque		0,5Nm
		1,5mm ² (30-16AWG) / Strip length / 5-6mm
		0,2Nm

PARAMETER	COND.	VALUE / SPECIFICATION
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PROTECTION (cont.)		
Contact discharge: ±4kV		Air discharge: ±8kV
Supply input over current protection		Internal Fuse 30A / Relay Output / External Fuse required / Digital Output
Overload, short circuit, ESD		Signal Input
Overvoltage, ESD		

ELECTRICAL CHARACTERISTICS		
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Supply voltage	12V range	10,2V – 15,0V
	24V range	20,4V – 30,0V
Signal input low level	12V range	0V – 3,6V
	24V range	0V – 7,2V
Signal input high level	12V range	9V – 13,2V
	24V range	18V – 26,4V
Analog signal input	12V range	0 – 13,2V
	24V range	0 – 26,4V
Signal input current	max. current	< 3mA
Signal output low level	12V range	0V – 2,4V
	24V range	0V – 4,8V
Signal output high level	V _{in} – 10%	Signal output – PWM functionality
	Duty cycle	5% – 95%
Relay output, Contact rating	Resistive	6A 250V AC /
	Load	30V DC
Common Relay terminal	max. current	6A
Galvanic insulation	coil to contact	3000VAC 1min
Relay ON in case of PWM functionality	Duty cycle	> 30%

LED SIGNALIZATION		
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Power LEDs coding		Color of power LED
only USB powered		12V green, 24V green
input voltage out of range		12V orange, 24V orange
input voltage 10.2V – 15,0V		12V green, 24V orange
input voltage 20.4V – 30,0V		12V orange, 24V green
input voltage < 7V		both LEDs off
Device in reset state		Reset LED yellow
Device in run state		Reset LED off
Signal input at high (logic 1) level		
Corresponding LED green		

PHYSICAL DIMENSIONS		
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