



NEXTuino PEAK PLUS FLEX

Industrial Programmable Logic Controller

- 18 Digital Inputs (12 a/d + 4 d + 2 fix d)
- 8 DO · 5 power-rated RO + 2x AI/AO
- Ethernet · USB-B · Pin header
- DIN-rail 72x90x62 mm · 270 g

PARAMETER	COND.	VALUE / SPECIFICATION
GENERAL		
Standard		EN61010-1 / EN61010-2-201 / EN61131-2
Dimensions (W x H x D)		72x90x62mm / Weight / 270g / 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		24 V
USB (Power for programming only)		USB-B, 2.0 / Ethernet
RJ45, 10/100Mbps		Analog inputs / 2x 0-10 V / Analog outputs / 2x 0-10 V or 0-20 mA
Inputs, no galvanic insulation		18
Common analog/digital		12 / Digital / 4
Fixed digital, ext. Interrupt usable		2
Digital Outputs, no galvanic insulation		8
Relay Outputs, galvanic insulation		5
PIN Header, no galvanic insulation		Logic level I/Os / 42, partially parallel to terminal I/Os
Analog 0-5V Inputs		12 / Communication
SPI, 2xUART, I2C, Reset		Internal Power / +3,3 V, +5 V, ARef, GND
TERMINAL CAPACITIES		
		2,5mm ² (24-12AWG) / Strip length / 6-7mm
		0,5Nm
		1,5mm ² (30-16AWG) / Strip length / 5-6mm
		0,2Nm

PARAMETER	COND.	VALUE / SPECIFICATION
TERMINAL CAPACITIES (cont.)		
Pin header connector		2x 26 Pin, Dual row, 2.54 pitch
PROTECTION		
ESD HBM Class 0		
Contact discharge: ±4kV		Air discharge: ±8kV
Supply input over current protection		Internal Fuse 20A / Relay Output / External Fuse required / Digital Output
Overload, short circuit, ESD		Signal Input
Overvoltage, ESD		
Pin header connector		ESD
Current +5V, +3,3V total 200mA, resettable fuse		
ELECTRICAL CHARACTERISTICS		
Supply voltage (Absolute Maximum)	24 V range	20,4 V – 30,0 V
Signal input low level	24 V range	0V–7,2V
Signal input high level	24 V range	18V–26,4V
Analog signal input	24 V range	0V–26,4V
Signal input current	max. current	< 3 mA
Logic "0" level	@ pin header	0V–1,5V
Logic "1" level	@ pin header	3V–5,5V
Signal output low level	24 V range	0V–4,8V
Signal output high level	Vin – 10 %	Signal output – PWM functionality
	Duty cycle	5% - 95%
Relay output, Contact rating	Resistive Load	16A250VAC/ 30VDC
Common Relay terminal	max. current	16A
Galvanic insulation	coil to contact	3000 VAC
	1 min	Relay ON in case of PWM functionality
	Duty cycle	>30%
LED SIGNALIZATION		
Power LEDs coding		Color of power LED
input voltage out of range		24V orange
only USB powered		24V orange
input voltage 20.4V – 30,0V		24V green
input voltage < 7V		LEDs off

PHYSICAL DIMENSIONS

