



## NEXTuino PEAK PLUS

Industrial Programmable Logic Controller

- 12 Digital Inputs + 10 Common A/D
- 12 Digital Outputs · 5 power-rated Relay Outputs
- Ethernet · USB-B · RS485 · Pin header
- DIN-rail 72×90×62 mm · 270 g

| PARAMETER                               | COND. | VALUE / SPECIFICATION                                      |
|-----------------------------------------|-------|------------------------------------------------------------|
| <b>GENERAL</b>                          |       |                                                            |
| Standard                                |       | EN61010-1 / EN61010-2-201 / EN61131-2                      |
| Dimensions (W × H × D)                  |       | 72x90x62mm / Weight / 270g / Mounting                      |
| Top hat rail EN50022, 35mm              |       |                                                            |
| <b>ENVIRONMENTAL CONDITIONS</b>         |       |                                                            |
| 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           |
| <b>I/O</b>                              |       |                                                            |
| 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          |       | 12                                                         |
| Common analog/digital                   |       | 10                                                         |
| Fixed digital, ext. Interrupt usable    |       | 2                                                          |
| Digital Outputs, no galvanic insulation |       | 12                                                         |
| 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                      |       | 14 / Communication                                         |
| SPI, 2xUART, I2C, Reset                 |       | Internal Power / +3,3V, +5V, ARef, GND                     |
|                                         |       | 2,5mm <sup>2</sup> (24-12AWG) / Strip length / 6-7mm       |
|                                         |       | 0,5Nm                                                      |
|                                         |       | 1,5mm <sup>2</sup> (30-16AWG) / Strip length / 5-6mm       |

| PARAMETER                             | COND.           | VALUE / SPECIFICATION                                                      |
|---------------------------------------|-----------------|----------------------------------------------------------------------------|
| TERMINAL CAPACITIES (cont.)           |                 |                                                                            |
| Max. tightening torque                |                 | 0,2Nm                                                                      |
| 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                        | 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                                                                      |
| Logic "0" level                       | @ pin header    | 0V – 1,5V                                                                  |
| Logic "1" level                       | @ pin header    | 3V – 5,5V                                                                  |
| Signal output low level               | 12V range       | 0V – 2,4V                                                                  |
|                                       | 24V range       | 0V – 4,8V                                                                  |
| Signal output high level              | Vin – 10%       | Signal output – PWM functionality                                          |
|                                       | Duty cycle      | 5% - 95%                                                                   |
| Relay output, Contact rating          | Resistive       | 16A 250V AC /                                                              |
|                                       | Load            | 30V DC                                                                     |
| Common Relay terminal                 | max. current    | 16A                                                                        |
| Galvanic insulation                   | coil to contact | 3000VAC 1min                                                               |
| Relay ON in case of PWM functionality | Duty cycle      | > 30%                                                                      |

PHYSICAL DIMENSIONS

