



## NEXTuino PEAK FLEX

Industrial Programmable Logic Controller

- 18 Digital Inputs (12 a/d + 4 d + 2 fix d)
- 8 DO · 10 RO + 2× AI 0-10V + 2× AO 0-10V/0-20mA
- Ethernet · USB-B · Pin header
- DIN-rail 72×90×62 mm · 240 g

| PARAMETER                               | COND. | VALUE / SPECIFICATION                                             |
|-----------------------------------------|-------|-------------------------------------------------------------------|
| <b>GENERAL</b>                          |       |                                                                   |
| Standard                                |       | EN61010-1 / EN61010-2-201 / EN61131-2                             |
| Dimensions (W × H × D)                  |       | 72x90x62mm / Weight / 240g / 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                          |       | 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      |       | 10                                                                |
| 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                          |
| <b>TERMINAL CAPACITIES</b>              |       |                                                                   |
|                                         |       | 2,5mm <sup>2</sup> (24-12AWG) / Strip length / 6-7mm              |
|                                         |       | 0,5Nm                                                             |
|                                         |       | 1,5mm <sup>2</sup> (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       | 6A250VAC/                                                                  |
|                                      | Load            | 30VDC                                                                      |
| Common Relay terminal                | max. current    | 6A                                                                         |
| 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

