

## EXPANSION MODULE (EM) "EVO NGIO"

### PURPOSE OF THE PRODUCT

The NGIO input-output expansion module (hereinafter referred to as EM) is intended for the construction of building automation systems and adjacent territories, as well as for the creation of automated control systems for technological equipment together with the NGC base unit.

### SPECIFICATIONS

<b>OVERALL DIMENSIONS</b>	<b>Length, max</b> - 195 mm <b>Width, max</b> - 100 mm <b>Height, max</b> - 55 mm <b>Weight</b> - no more than 500 grams
<b>POWER SUPPLY</b>	<b>Supply voltage, V:</b> 9 ... 28 <b>Consumed current, A, no more:</b> 0.75 <b>Reverse polarity protection</b> <b>Overcurrent protection</b> <b>Overvoltage protection</b>
<b>RS-485</b>	<b>Quantity:</b> 2 <b>Type:</b> galvanically isolated <b>Operating mode:</b> half-duplex <b>Maximum data transfer rate, kbit / sec:</b> 115200 <b>Exchange protocol:</b> MODBUS-RTU (1xMaster, 1xSlave) <b>Maximum number of connected devices:</b> 32 <b>Insulation voltage, kV:</b> 2.5 <b>ESD protection, kV:</b> ± 15
<b>DIGITAL INPUTS</b>	<b>Number:</b> 16 <b>Type:</b> galvanically isolated, by "minus" <b>Rated current consumption, mA:</b> 10 <b>Insulation voltage, kV:</b> 2.5 <b>ESD protection, kV:</b> ± 15
<b>PWM OUTPUTS</b>	<b>Quantity:</b> 4 <b>Type:</b> Open collector <b>Maximum output current, mA:</b> 100 <b>Maximum voltage, V:</b> 40 <b>PWM frequency, Hz:</b> 100 ... 10000

<b>ANALOG OUTPUTS</b> (with additional PCB)	<b>Quantity:</b> 16 <b>Type:</b> 0-10 V <b>Maximum output current, not less, mA:</b> 20 <b>Minimum output voltage, no more, V:</b> 0.75 <b>Maximum output voltage, not less than, V:</b> 10
<b>1-WIRE BUS</b>	<b>Quantity:</b> 3 <b>Maximum number of connected devices:</b> 32 <b>The possibility of parasitic power:</b> Yes <b>Supported baud rates:</b> Standard and overdrive <b>Rated voltage on the bus, V:</b> 5

**CONSTRUCTION TYPE** – Stationary

**PROTECTION DEGREE** – Not less than IP20

**MODE OF OPERATION** – Continuous round-the-clock

AC is not for installation and operation in explosive and fire hazardous conditions.  
Precious metals did not exist.

The spacecraft is not for work in special environments.  
Qualified personnel are required for installation and use.

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## DISPOSAL INFORMATION

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The box does not belong to environmentally hazardous products and does not harm the environment and human health during storage, transportation, operation and disposal. No special measures to protect the environment from harmful effects are required when disposing of the device.