

## MINI RS485 SERIES FIRMWARE VERSIONS

The list below contains modifications and new features:

Name	Description																
<p><b>Firmware version 6.3</b></p> <p>Release date 03.03.2020</p>	<p><b>New functions:</b></p> <ul style="list-style-type: none"> <li>New temperature sensors implemented in Celsius and Fahrenheit degrees</li> </ul> <table border="1" data-bbox="587 577 1391 1032"> <thead> <tr> <th data-bbox="587 577 986 667">Temp. sensors in Celsius degrees</th> <th data-bbox="986 577 1391 667">Temp. sensors in Fahrenheit degrees</th> </tr> </thead> <tbody> <tr> <td data-bbox="587 667 986 719">NI1000 21C</td> <td data-bbox="986 667 1391 719">10K Type2 NTC B=3975K</td> </tr> <tr> <td data-bbox="587 719 986 770">NI1000 LG</td> <td data-bbox="986 719 1391 770">10K Type3 NTC B=3695K</td> </tr> <tr> <td data-bbox="587 770 986 822"></td> <td data-bbox="986 770 1391 822">20K NTC B=4262K</td> </tr> <tr> <td data-bbox="587 822 986 873"></td> <td data-bbox="986 822 1391 873">3K NTC B=3975K</td> </tr> <tr> <td data-bbox="587 873 986 925"></td> <td data-bbox="986 873 1391 925">PT1000</td> </tr> <tr> <td data-bbox="587 925 986 976"></td> <td data-bbox="986 925 1391 976">NI1000 32F</td> </tr> <tr> <td data-bbox="587 976 986 1032"></td> <td data-bbox="986 976 1391 1032">NI1000 70F</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>New Modbus function 0x17 Read/Write Multiple registers</li> <li>New Modbus function 0x2B to read the VENDOR_NAME,MODEL_NAME, FW_VERSION, HOMEPAGE</li> </ul> <p><b>Improvements:</b></p> <ul style="list-style-type: none"> <li>Improved filtering on UI</li> <li>Device Name (Object Name) in BACnet is saved in EEPROM memory</li> </ul> <p><b>Fixed bugs:</b></p> <ul style="list-style-type: none"> <li>Fixed one record in sensor 30k6A1 table –resistance 60713 to 80713 (5°C)</li> </ul>	Temp. sensors in Celsius degrees	Temp. sensors in Fahrenheit degrees	NI1000 21C	10K Type2 NTC B=3975K	NI1000 LG	10K Type3 NTC B=3695K		20K NTC B=4262K		3K NTC B=3975K		PT1000		NI1000 32F		NI1000 70F
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<p><b>Firmware version 6.0</b></p> <p>Release date 07.12.2017</p>	<p><b>New functions:</b></p> <ul style="list-style-type: none"> <li>Firmware Version 6.0 released with BACnet certification</li> <li>Added possibility to upgrade devices firmware via BACnet</li> </ul> <p><b>Fixed bugs:</b></p> <ul style="list-style-type: none"> <li>Fixed out of service flags in AO, BO and TO in BACnet</li> <li>Fixed overridden flags in AO, BO and TO in BACnet</li> <li>Fixed bug with number of counters for Binary Input object (now variable is 32-bit)</li> </ul>																

	<ul style="list-style-type: none"> <li>• Changed AO-1, BO-1, TO-1 HAND_STATUS Access to read only in BACnet</li> </ul>
<b>Firmware version 5.2</b>  Release date 17.01.2017	<b>Fixed bugs:</b> <ul style="list-style-type: none"> <li>• Fixed bug with RS485 communication problem after device update (in FW version 5.0 and 5.1 power-up cycle was needed to work properly);</li> </ul>
<b>Firmware version 5.1</b>  Release date 13.01.2017	<b>Fixed bugs:</b> <ul style="list-style-type: none"> <li>• Fixed bug with saving configuration to EEPROM memory (In FW version 5.0 once for dozens of records to the EEPROM memory can fail)</li> </ul>
<b>Firmware version 5.0</b>  Release date 04.01.2017	<b>New functions:</b> <ul style="list-style-type: none"> <li>• New HVAC functions Heating and Cooling in 4U40 based on output thermostatic control with a setpoint and differential value setting;</li> <li>• Added new input mode for 4I40: Time Relay NC [ms], Time Relay NO and NC in seconds, Input Forwarding;</li> <li>• Added new input mode for 4U40: Ordinary IO, Monostable Relay, Bistable Relay, Time Relay NO and NC [ms], Time Relay NO and NC in seconds, Input Forwarding, Heating, Cooling with corresponding BACnet objects and Modbus registers;</li> <li>• Added reset output to default after input mode change in 4U40 and 4I40;</li> </ul> <b>Improvements:</b> <ul style="list-style-type: none"> <li>• Improved BACnet COV Increment can now have values with resolution 0.1;</li> <li>• Added BACnet COV Increment access (read/write) through USB;</li> <li>• Added power Led flashing after IO watchdog triggered;</li> <li>• Changed IO watchdog reset after read/write registers through USB;</li> <li>• Added immediately detecting sensors short circuit and disconnection regardless of filter settings on universal inputs;</li> </ul> <b>Fixed bugs:</b> <ul style="list-style-type: none"> <li>• Fixed bug with Stop bits, was always 1;</li> </ul>
<b>Firmware version 4.3</b>	<ul style="list-style-type: none"> <li>• UI filter improved (better signal stability at a lower filter time constant);</li> </ul>

<p>Release date 28.09.2016</p>	<ul style="list-style-type: none"> <li>Fixed a physical output state when priority table is null in BACnet Binary/Analog/Triac Output object (when priority table is null physical output is set to relinquish default value);</li> </ul>
<p><b>Firmware version 4.2</b></p> <p>Release date 22.04.2016</p>	<ul style="list-style-type: none"> <li>Added new module 4TO-H</li> <li>Added possibility set COV Increment via USB by iSMA-Configurator;</li> <li>Fixed led flashing in module 4U4A when AO_VALUE &gt; 0 in 0-10V mode</li> </ul>
<p><b>Firmware version 4.0</b></p> <p>Release date 18.01.2016</p>	<ul style="list-style-type: none"> <li>New BACnet objects for configuration, detail in manual;</li> <li>Improved configuration of flag Out Of Service and Override in Digital Outputs and Analog Outputs;</li> <li>Added COV Increment for Universal Inputs and Analog Outputs</li> <li>BACnet Out Of Service for UI and BI with the possibility of overwriting present value;</li> <li>BACnet Analog Output and Binary Output priority table reset after watchdog was triggered;</li> <li>Added BACnet device property (Active COV Subscriptions);</li> <li>Added BACnet objects for additional modes in 4I40;</li> <li>Improved Resistance measurement on Universal Input for increased accuracy of PT1000 and NI1000;</li> <li>Improved counter of TX and RX frames in MS/TP BACnet;</li> <li>Improved additional modes in 4I40;</li> </ul>
<p><b>Firmware version 1.0</b></p> <p>Release date 13.07.2015</p>	<ul style="list-style-type: none"> <li>Improved stability and speed in BACnet MS/TP;</li> <li>Default settings after reset for Analog Outputs;</li> <li>Changed Firmware Version and Application Software Version in BACnet;</li> <li>Changed saving counters via USB and Modbus (regular verification of changing settings);</li> <li>Improved reading structure of bits in Modbus (reset irrelevant bits);</li> </ul>
<p><b>Firmware version 0.8</b></p> <p>Release date 12.06.2015</p>	<ul style="list-style-type: none"> <li>First release</li> </ul>