

# MINI-IP

## IP Multiprotocol I/O Modules

### iSMA-B-MINI-IP Software Bundle 7.1

2025

The list below contains modifications and new features since the release of software bundle version 7.0.

NAME	DESCRIPTION
<b>MINI-IP</b> <b>Ver. 7.1</b> Release date 18 Jun 2023	<b>New functionalities:</b> <ul style="list-style-type: none"><li>BACnet Protocol Revision 22 Update</li><li>New B-SS (BTL-31278) and B-SA (BTL-31262) BACnet Conformance Certificate</li><li>New services and objects added according to BACnet 1.22 standard<ul style="list-style-type: none"><li>added ReinitializeDevice service</li><li>added ReadRange service</li><li>added Network Port object</li></ul></li><li>Added support for custom Modbus intermessage delay for RS485 Gateway function</li></ul> <b>Improvements:</b> <ul style="list-style-type: none"><li>ASV (Application software version) value changed to 1.0</li><li>Send Modbus Error Codes supported and can be enabled/disabled in both IP and RS485 I/O Modules</li></ul> <b>Fixed bugs:</b> <ul style="list-style-type: none"><li>New BACnet ID not accepted after reload settings</li></ul>

### iSMA-B-MINI-IP Software Bundle 7.0

2023

The list below contains modifications and new features since the release of software bundle version 6.5.

NAME	DESCRIPTION
<b>iSMA-B-MINI-IP</b> <b>Ver. 7.0</b> Release date 10 Nov 2023	<b>New functionalities:</b> <ul style="list-style-type: none"><li>DHCP client feature added to request IP configuration from a DHCP server; disabled by default</li><li>Added Modbus TCP socket counter</li></ul> <b>Improvements:</b> <ul style="list-style-type: none"><li>Rebranded webserver</li></ul> <b>Fixed bugs:</b> <ul style="list-style-type: none"><li>BACnet Application Software Version value changed to fixed 1.0</li></ul>

The list below contains modifications and new features since the release of software bundle version 6.4.

NAME	DESCRIPTION
<b>iSMA-B-MINI-IP Ver. 6.5</b> Release date 13 Oct 2020	<b>Improvements:</b> <ul style="list-style-type: none"><li>the default BBMD IP address set to 0.0.0.0;</li><li>registering to the BBMD server is disabled if the BBMD IP address is left default;</li><li>added option to disable the web server access by setting the HTTP port to 0;</li><li>4U4O: if the default temperature sensor is set to Fahrenheits, the default setpoint temperature is 70°F;</li><li>BACnet stability improvement.</li></ul> <b>Fixed bugs:</b> <ul style="list-style-type: none"><li>fixed Modbus statistics on www: Modbus Received / Error / Transmitted Frames;</li><li>fixed BACnet ID changes to reload settings;</li><li>fixed loss of frames over the BACnet IP;</li><li>fixed UI filter reset in case of short disconnection of the sensor;</li><li>PT1000 temperature sensor fix for readings over 350°C.</li></ul>

The list below contains modifications and new features since the release of software bundle version 6.3.

NAME	DESCRIPTION
<b>iSMA-B-MINI-IP Ver. 6.4</b> Release date 3 Jun 2020	<b>Fixed bugs:</b> <ul style="list-style-type: none"><li>fixed TCP/UDP/IP stack issue, caused by 6.3 firmware that may have frozen BACnet IP communication;</li><li>temperature value of disconnected sensor on UI restored to min/max INT value, issue caused by 6.3 firmware.</li></ul>

The list below contains modifications and new features since the release of software bundle version 6.2.

NAME	DESCRIPTION																
<b>iSMA-B-MINI-IP Ver. 6.3</b> Release date 3 Mar 2020	<p><b>New functionalities:</b></p> <ul style="list-style-type: none"> <li>new temperature sensors implemented in Celsius and Fahrenheit degrees:               <table border="1"> <thead> <tr> <th>Celsius</th><th>Fahrenheit</th></tr> </thead> <tbody> <tr> <td>NI1000 21C</td><td>10K Type2 NTC B=3975K</td></tr> <tr> <td>NI1000 LG</td><td>10K Type3 NTC B=3695K</td></tr> <tr> <td></td><td>20K NTC B=4262K</td></tr> <tr> <td></td><td>3K NTC B=3975K</td></tr> <tr> <td></td><td>PT1000</td></tr> <tr> <td></td><td>NI1000 32F</td></tr> <tr> <td></td><td>NI1000 70F</td></tr> </tbody> </table> </li> <li>upgraded built-in Web page with all new temperature sensors;</li> <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> <li>supporting Modbus address 0xFF for communication with gateway (IP module).</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> <li>“Send I Am” message is not sent if BACnet is turned off.</li> </ul>	Celsius	Fahrenheit	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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The list below contains modifications and new features since the release of software bundle version 6.1.

NAME	DESCRIPTION
<b>iSMA-B-MINI-IP Ver. 6.2</b> Release date 30 Jul 2018	<p><b>New functionalities:</b></p> <ul style="list-style-type: none"> <li>support new HW V3.2 with UL certification by iSMA Configurator.</li> </ul> <p><b>Fixed bugs:</b></p> <ul style="list-style-type: none"> <li>fixed Modbus TCP/IP socket timeout issue.</li> </ul>

The list below contains modifications and new features since the release of software bundle version 6.0.

NAME	DESCRIPTION
<b>iSMA-B-MINI-IP Ver. 6.1</b> Release date 12 Apr 2018	<p><b>Fixed bugs:</b></p> <ul style="list-style-type: none"> <li>fixed reset of live time value;</li> <li>fixed inputs/outputs Watchdog issue related to live time value.</li> </ul>

The list below contains modifications and new features since the release of software bundle version 5.5.

NAME	DESCRIPTION
<b>iSMA-B-MINI-IP Ver. 6.0</b> Release date 7 Dec 2017	<b>New functionalities:</b> <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> <b>Fixed bugs:</b> <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><li>changed AO-1, BO-1, TO-1 HAND_STATUS Access to read only in BACnet.</li></ul>

The list below contains modifications and new features since the release of software bundle version 5.0.

NAME	DESCRIPTION
<b>iSMA-B-MINI-IP Ver. 5.5</b> Release date 1 Jun 2017	<b>New functionalities:</b> <ul style="list-style-type: none"><li>added new proprietary properties in BACnet Device object: HW version, Modbus register 0 reference, RS485 biasing, RS485 actual baud rate, RS485 user baud rate, IP address, subnet, gateway, HTTP port, UDP port;</li><li>added new Modbus registers: HW version, MAC address;</li><li>added new elements on built-in web page: HW version, RS485 biasing.</li></ul> <b>Improvements:</b> <ul style="list-style-type: none"><li>improved Ethernet communication in Modbus gateway mode.</li></ul> <b>Fixed bugs:</b> <ul style="list-style-type: none"><li>fixed built-in web page (now BACnet COV Increment always in format with one decimal place).</li></ul>

The list below contains modifications and new features since the release of software bundle version 4.7.

NAME	DESCRIPTION
<b>iSMA-B-MINI-IP Ver. 5.0</b> Release date 4 Jan 2017	<p><b>New functionalities:</b></p> <ul style="list-style-type: none"> <li>new HVAC functions Heating and Cooling in 4U4O based on output thermostatic control with a setpoint and differential value setting;</li> <li>added new input mode for 4I4O: Time Relay NC [ms], Time Relay NO and NC in seconds, Input Forwarding;</li> <li>added new input mode for 4U4O: 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 4U4O and 4I4O.</li> </ul> <p><b>Improvements:</b></p> <ul style="list-style-type: none"> <li>improved BACnet COV Increment can now have values with resolution 0.1;</li> <li>added power Led flashing after IO watchdog triggered;</li> <li>added immediately detecting sensors short circuit and disconnection regardless of filter settings on universal inputs;</li> <li>added to Built-in Web page new modes in 4U4O as an additional table in UI tab.</li> </ul> <p><b>Fixed bugs:</b></p> <ul style="list-style-type: none"> <li>fixed bug with Stop bits, was always 1.</li> </ul>

The list below contains modifications and new features since the release of software bundle version 4.6.

NAME	DESCRIPTION
<b>iSMA-B-MINI-IP Ver. 4.7</b> Release date 28 Sep 2016	<p><b>Improvements:</b></p> <ul style="list-style-type: none"> <li>Modbus TCP exception codes improved;</li> <li>UI filter improved (better signal stability at a lower filter time constant);</li> <li>improved Ethernet stability (when module receive lots of errors on MAC layer will run auto-negotiation mode one more time).</li> </ul> <p><b>Fixed bugs:</b></p> <ul style="list-style-type: none"> <li>fixed built-in web page (4I4O special modes fixed, BACnet COV Increment "0" value cannot be set, getting counter 4 fixed);</li> <li>fixed 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>

The list below contains modifications and new features since the release of software bundle version 4.5.

NAME	DESCRIPTION
<b>iSMA-B-MINI-IP Ver. 4.6</b> Release date 13 May 2016	<p><b>Fixed bugs:</b></p> <ul style="list-style-type: none"> <li>fixed DI tab in the built-in web page (in FV V4.5 entering this tab refreshed whole page).</li> </ul>

The list below contains modifications and new features since the release of software bundle version 4.4.

NAME	DESCRIPTION
<b>iSMA-B-MINI-IP Ver. 4.5</b> Release date 30 Mar 2016	<b>New functionalities:</b> <ul style="list-style-type: none"> <li>added new module 4TO-H-IP.</li> </ul> <b>Improvements:</b> <ul style="list-style-type: none"> <li>improved algorithm of handling Modbus TCP connections and data (when incorrect data arrives device will close the connection);</li> <li>improved Ethernet stability when device receive invalid Ethernet frame.</li> </ul>

The list below contains modifications and new features since the release of software bundle version 4.2.

NAME	DESCRIPTION
<b>iSMA-B-MINI-IP Ver. 4.3</b> Release date 18 Jan 2016	<b>Improvements:</b> <ul style="list-style-type: none"> <li>improved UI measurement for 16-bit resolution.</li> </ul>

The list below contains modifications and new features since the release of software bundle version 2.8.

NAME	DESCRIPTION
<b>iSMA-B-MINI-IP Ver. 4.2</b> Release date 12 Jan 2016	<b>New functionalities:</b> <ul style="list-style-type: none"> <li>new BACnet objects for configuration, detail in manual;</li> <li>added BACnet device property (Active COV Subscriptions);</li> <li>added BACnet objects for additional mode in 4I40.</li> </ul> <b>Improvements:</b> <ul style="list-style-type: none"> <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>improved resistance measurement on universal input for increased accuracy of PT1000 and NI1000;</li> <li>reading new IP address after reload settings;</li> <li>added flag Send Modbus Error;</li> <li>improved socket service interface for Modbus protocol;</li> <li>added PHY reset when error was detected (improved Ethernet stability);</li> <li>protocol Type has moved to IP Configuration on built-in web page;</li> <li>improved mode in 4I40;</li> <li>disable BACnet protocol when Dipswitch are set to Modbus.</li> </ul> <b>Fixed bugs:</b> <ul style="list-style-type: none"> <li>fixed temperature sensor configuration for universal input.</li> </ul>

The list below contains modifications and new features since the release of software bundle version 2.7.

NAME	DESCRIPTION
<b>iSMA-B-MINI-IP Ver. 2.8</b> Release date 23 Sep 2015	<b>Fixed bugs:</b> <ul style="list-style-type: none"><li>resolved problem with BACnet hanging after device reset.</li></ul>

The list below contains modifications and new features since the release of software bundle version 2.2.

NAME	DESCRIPTION
<b>iSMA-B-MINI-IP Ver. 2.7</b> Release date 28 Aug 2015	<b>Improvements:</b> <ul style="list-style-type: none"><li>added functionality to make edit User Baud Rate on the built-in web page;</li><li>improvement of error codes in Modbus TCP;</li><li>additional login 'platform' to the built-in web page.</li></ul>

The list below contains modifications and new features since the release of software bundle version 2.0.

NAME	DESCRIPTION
<b>iSMA-B-MINI-IP Ver. 2.2</b> Release date 6 Aug 2015	<b>Improvements:</b> <ul style="list-style-type: none"><li>improved layout on built-in web page;</li><li>improved saving to EEPROM (counters after restore default settings was not saved).</li></ul>

The list below contains modifications and new features since the release of software bundle version 1.0.

NAME	DESCRIPTION
<b>iSMA-B-MINI-IP Ver. 2.0</b> Release date 13 Jul 2015	<b>New functionalities:</b> <ul style="list-style-type: none"><li>• added IO watchdog for AO (the built-in web page reset IO watchdog);</li><li>• added hand properties in BACnet.</li></ul> <b>Improvements:</b> <ul style="list-style-type: none"><li>• improved logic in 4I4O;</li><li>• Watchdog default set to 0;</li><li>• improved filter for universal input - may accept value 0;</li><li>• added 0,1Hz and 0,01Hz PWM modes for analog outputs.</li></ul> <b>Fixed bugs:</b> <ul style="list-style-type: none"><li>• resolved problem with saving counters in 4I4O;</li><li>• corrections on the built-in web page.</li></ul>

NAME	DESCRIPTION
<b>iSMA-B-MINI-IP Ver. 1.0</b> Release date 1 Jul 2015	First release.