iSMA-B-AAC20

Advanced Application Controller

iSMA-B-AAC20 Software Bundle 6.4   **2024**

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

NAME	DESCRIPTION
iSMA-B-AAC20 Ver 6.4: Release date 18.07.2024	**New Functionalities:** • BACnet points discovery • Web users functionality for the Visualization web server • iSMA_ControlApi – ActiveAlarms – a new component counting active alarms • iSMA_Control – IntSplit – a new component converting integer values **Improvements:** • Light theme for the Visualization web server • Enum variables support – possibility to add strings to a numeric variable • iSMA_ModbusTcpNetwork – checking transaction ID of received Modbus frames • iSMA_BACnetIPMaster, iSMA_BACnetMSTPMaster – the State Text property no longer considered mandatory • iSMA_Control – Toggle component saves its state after a reboot/restart action • iSMA_Control – BackwardEulerLoopPoint - implementation of a new PID controller (continuous-time to discrete-time via backward Euler method) • iSMA_Control – NumericBitAnd, NumericBitOr, NumericBitXor – added conversion of floating point numbers for In and Mask inputs to integer values • iSMA_platAAC20 – AAC20PlatformService – the Cpu Usage parameter changed to the Cpu App Usage • iSMA_LCD – BoolLine – support of a monostable mode • iSMA_BACnetMSTPMaster/iSMA_BACnetIPMaster – the Discover action does not remove previously added devices • iSMA_ModbusRJ12 – ModbusBooleanWritable/ModbusNumericWritable/ RegisterBitWritable – Implementation of the COV_LinkSet in point • iSMA_ModbusTcpSlaveNetwork – BooleanValue/NumericValue/MultiStateValue - new MultiStateValue network point, validation of address value range • iSMA_RoomDevices_Modbus – rebranded components for iC wall panels **Fixed Bugs:** • Modbus TCP Server – fixed closing of the TCP connection • Fixed problem with high Cpu • iSMA_Control - SequenceLinear – fixed problem with resetting of state and wrong output slot • iSMA_LCD – BoolLine – fixed problem with an incorrect value displayed after changing the logic value from LCD • iSMA_ControlApi – OutOfRangeAlarm – fixed problem with of the Deadband parameter • iSMA_BACnet – MultiStateValue – fixed problem with a link-set function in the MultistateValue component • iSMA_BACnet – LocalDevice/BacnetObjects – fixed problem with duplication of BACnet components • iSMA_BACnet – fixed trends object ID • Fixed typo in Polish lexicon

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

NAME	DESCRIPTION
iSMA-B-AAC20 Ver 6.3: Release date 07.05.2023	**Improvements:** • Overall stability improvements • iSMA_Weather - change OpenWeatherMap API version from 2.5 to 3.0 **Fixed Bugs:** • iSMA_Modules - fixed DI_ALL component

The list below contains modifications and new features since the release of software bundle version 6.1.

NAME	DESCRIPTION
iSMA-B-AAC20 Ver 6.2: Release date 14.04.2023	**Improvements:** • Overall stability improvements • Rebranded BACnet Vendor Name to "iSMA CONTROLLI S.p.A." **Fixed Bugs:** • BACnet - Fixed too fast responding over BACnet MSTP

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

NAME	DESCRIPTION
iSMA-B-AAC20 Ver 6.1: Release date 05.05.2022	**New Functionalities:** • iSMA_VisualizationWebServer new kit for the new visualisation web server • Visualisation WebServer demo application added to the Software Bundle • ModbusAsyncSlaveExtension added to ModbusTCPSlaveNetwork to support AAC20 as a server (slave) on a serial bus • ActiveAlarmLine component in iSMA_LCD kit to display active alarms on the LCD screen • iSMA_RoomDevices_Modbus support for the Touch Point • iSMA_control new Toggle component **Improvements:** • Overall stability improvements • iSMA_LCD allow invoking actions based on operator/admin permissions on the LCD screen • rebranded LCD boot-up screen • rebranded configuration web server • Sedona Updater name updated to AAC20 Updater • New Sedona Updater Icon **Fixed Bugs:** • BACnet - Fixed an issue causing points to stop being properly updated in unstable network conditions • iSMA_LCD - NumericScheduleLine - fixed displaying decimal points • iSMA_ModbusTcpNetwork - fixed RegisterBitsPoint component • iSMA_Control – Tstat component hysteresis works according to the documentation • iSMA_Control – sequenceLinear component output slot working according to the documentation • iSMA_Control – fixed Feedback slot operation in LeadLagRuntime and LeadLagCycles components

The list below contains modifications and new features since the release of software bundle version 5.9.

NAME	DESCRIPTION
iSMA-B-AAC20 Ver 6.0: Release date 18 Aug 2020	This firmware and kits fit only devices with Hardware Version 1.1 or higher! **New Functionalities:** • firmware Version 6.0 released with BACnet certification. **Improvements:** • BACnet Protocol-Revision updated to 16; • improved navigation on LCD display; • improved UI filtering resistance and temperature; • Watchdog timeout disabled by default (setting value changed from 15s to 0s); • Plat Service - added action "Reload Firmware" triggering reboot with reloading firmware; • History Service - Added slot enabling/disabling collecting the history logs (iSMA_controlAPI); • improved functionalities of Schedule, Notification Class, Trendlog according to BACnet Laboratory recommendations; • Apdu timeout changed for 6000ms according to standard recommendation; • updated company information (Web Server). **Fixed Bugs:** • fixed bug with BooleanDelay - Out slot operation by start when In slot is already set to True (iSMA Control kit); • fixed bug with not working Weather kit. Reconfiguration of kit is required according to new iSMA-B-AAC20 _Manual_Weather_V1.1; • fixed bug with reversed UI Voltage measurement slot; • fixed saving the empty day, saving week day in effective period in Schedules; • fixed slot EventEnable reading in Multi-State Value; • fixed slot AlarmValue does not accept null in Binary Value; • fixed relinquish default in AO and general update; • fixed dependency in kit.

The list below contains modifications and new features since the release of software bundle version 5.6.1.

NAME	DESCRIPTION
iSMA-B-AAC20 Ver 5.8: Release date 27 Jan 2020	This firmware and kits fit only devices with Hardware Version 1.1 or higher! **New Functionalities:** • added web autologin function; • added support of new sensors (NI1000 21C; NI1000 LG); • added new kit with Sunblind and AdvanceSunblind components. **Improvements:** • improved non-commandable objects in iSMA_BACnetMSTPMaster and iSMA_BACnetIPMaster; • added slot to autologin in the iSMA_PlatAAC20. **Fixed Bugs:** • fixed bug with Daylight saving time settings.

The list below contains modifications and new features since the release of software bundle version 5.5.0.

NAME	DESCRIPTION
iSMA-B-AAC20 Ver 5.6.1: Release date 24 Apr 2019	This firmware and kits fit only devices with Hardware Version 1.1 or higher! **New Functionalities:** • added "Scene Setter" component in the iSMA_DALI kit. **Improvements:** • improved speed of LCD display response; • improved overall operation of the DALI kit. **Fixed Bugs:** • LCD login failure – fix; • fixed bug related to writing 0 value to the scene; • fixed bug related to Loop point having "null" value on the output (iSMA Control kit); • fixed bug related to temperature calculation in TempConversion component; • fixed bug related to license error in some components at the moment of application start; • BACnet MSTP - fixed bug related to network recovery after timeout.

The list below contains modifications and new features since the release of software bundle version 5.4.0.

NAME	DESCRIPTION
iSMA-B-AAC20 Ver 5.5.0: Release date 4 Oct 2018	This firmware and kits fit only devices with Hardware Version 1.1 or higher! **New Functionalities:** • iSMA-B-AAC20 controller can be connected to any Modbus device! Added Function 16 to write the value on numeric registers; • COV_LinkSet mode is available for all writable Modbus points on Modbus Async and Modbus TCP network; • added PropertyList to all objects; • added support for Foreign Device by slots: bbmdAddress and registrationLifetime in LocalDevice. **Improvements:** • 1-Wire - more stable work; • improvements for reading historical data; • alarm sending improvements. **Fixed Bugs:** • fix for immediate writing value on WriteOnUp and WriteOnStart (iSMA_RoomDevices_Modbus kit); • reset counters in LCD menu – fix; • correct the calculation of value based on priority; • correct the calculation for a remote change of time with DaylightSaving enabled; • fix issue with communication when receiving a rejected command from slave device.

iSMA-B-AAC20 Software Bundle 5.4.0   **12 Jun 2018**

The list below contains modifications and new features since the release of software bundle version 5.3.0.

NAME	DESCRIPTION
iSMA-B-AAC20 Ver 5.4.0: Release date 12 Jun 2018	This firmware and kits fit only devices with Hardware Version 1.1 or higher! **Improvements:** • improved power management; • improved IP configuration; • update and improved file system; • Improved relinquishDefault in MSV, AO, AV, BO, BV BACnet objects. **Fixed Bugs:** • fix automatic app save; • fix OptimizedStartStop component.

The list below contains modifications and new features since the release of software bundle version 5.2.1.

NAME	DESCRIPTION
iSMA-B-AAC20 Ver 5.3.0: Release date 23 Feb 2018	This firmware and kits fit only devices with Hardware Version 1.1 or higher! **New Functionalities:** • added DNS support; • added functions for DNS (Inet kit); • added slots related to DNS (iSMA_platAAC20); • added slots Next Event Time Next Event Value to Numeric and Boolean Schedulers (iSMA_ControlApi); • changes related to changes in iSMA_ControlApi (BACnet); • added configurable parameters in MSTP Network: o MAC address; o Max master; o Max info frames; • added components: o DALIOnOff; o DALIOnOffDimming1Switch; o DALIOnOffDimming2Switch; o DALIOnOffPresetValue; o DALIOnOffRecallScene; • added slots presetTrigger and clearTrigger to Counter; • changed minimal value of onDelay and offDelay slots to 0; • new kit with components: o ActionTrigger; o DimmerSwitch; o RaiseLower.

The list below contains modifications and new features since the release of software bundle version 5.2.0.

NAME	DESCRIPTION
iSMA-B-AAC20 Ver 5.2.1: Release date 14 Jun 2017	This firmware and kits fit only devices with Hardware Version 1.1 or higher! **New Functionalities:** • added lexicons in English, German, French and Polish. **Fixed Bugs:** • fixed connection with weather provider.

The list below contains modifications and new features since the release of software bundle version 5.1.1.

NAME	DESCRIPTION
iSMA-B-AAC20 Ver 5.2.0: Release date 18 May 2017	This firmware and kits fit only devices with Hardware Version 1.1 or higher! **New Functionalities:** • added DHCP and AutoIP (Automatic Private IP Addressing); • added Device Communication Control Service (BACnet); • added Reinitialize Device Service (BACnet); • added configurable password for Reinitialize Device and Device Communication Control Services (BACnet); • added translation of embedded menu (LCD); • added option to disable buzzer (LCD); • added option to select the Modbus address format (iSMA_ModbusTcpSlaveNetwork); • added actions for resetting statistics (M-Bus). **Improvements:** • increased precision of resistance measurement if Pt1000 or Ni1000 is selected (LocalIO); • increased detection rate of short-circuits and openings at high filter values in universal inputs (LocalIO); • changed appearance of the displayed menu (LCD); • improvements during connections in M-Bus-IP (M-Bus). **Fixed Bugs:** • fixed bug in reading Time Zone via BACnet; • bug fixes and improvements (LCD, M-Bus); • fixed bug in Scheduler - if the event lasted from 00:00 to 00:00 was not taken into account (iSMA_ControlApi); • fixed statuses if license is missed (iSMA_ModbusTcpNetwork); • fixed pinging and writeOnUp after reconnection with device (iSMA_ModbusTcpNetwork); • fixed writeOnUp in COVLinkSet mode (iSMA_ModbusAsync).

The list below contains modifications and new features since the release of software bundle version 5.1.0.

NAME	DESCRIPTION
iSMA-B-AAC20 Ver 5.1.1: Release date 3 Nov 2016	This firmware and kits fit only devices with Hardware Version 1.1 or higher! **New Functionalities:** • added support for devices sending large amount of data (M-Bus).

The list below contains modifications and new features since the release of software bundle version 5.0.0.

NAME	DESCRIPTION
iSMA-B-AAC20 Ver 5.1.0: Release date 25 Oct 2016	This firmware and kits fit only devices with Hardware Version 1.1 or higher! **New Functionalities:** • added support for Daylight Saving Time; • added M-Bus Extension support; • added support to reading M-Bus devices via M-Bus extension and IP; • added support to DST (Datetime); • time synchronization via NTP protocol; • sending alarms from AlarmService via e-mail. **Improvements:** • changes to standardize with other kits. **Fixed Bugs:** • fixed bug related to reading BooleanWeeklySchedule via BACnet; • fixed bug related to BACnet GetEvenInformation Service.

The list below contains modifications and new features since the release of software bundle version 4.6.0.

NAME	DESCRIPTION
iSMA-B-AAC20 Ver 5.0.0: Release date 1 Aug 2016	This firmware and kits fit only devices with Hardware Version 1.1 or higher! **New Functionalities:** • added ability of editing WeeklySchedules via LCD; • added support of alarms in Analog Value, Binary Value and MultiState Values objects; • added MultiStateValue line (LCD); • added support of Special Events in schedules (BACnet); • force application auto save on power outage; • detecting broken kits and/or app and stop running Sedona VM. **Improvements:** • detecting changes in application (used by auto save function in Platform); • improvements in auto save function: save only if application changes (Platform); • improvements in measuring temperature using Pt1000 and Ni1000 sensors; • improvements in sending large packages (SOX). **Fixed Bugs:** • fixed wrong baud rate from 78600 to 76800 (BACnet, Modbus); • fixed unintended reboot after few cycles of Enable and Disable Modbus Async Network; • fixed bug with unintended reboot if received corrupted ModbusTCP frame; • fixed bug with unintended reboot which occurs sporadically during removing Modbus Async components or restart AAC20 application if these components were in use.

The list below contains modifications and new features since the release of software bundle version 4.5.0.

NAME	DESCRIPTION
iSMA-B-AAC20 Ver 4.6.0: Release date 20 Apr 2016	**New Functionalities:** • added support of BACnetMSTP; • new kits: BACnetMSTP and iSMA_weather; **Improvements:** • added Enable network slot (1-Wire); **Fixed Bugs:** • fixed time zones on the West from 0 degrees; • fixed group commands (DALI); • fixed copy error of NV components when Alarm, totalizer or history were enabled (iSMA_platAAC20); • fixed Location and Description slots (they were swapped) (BACnet).

iSMA-B-AAC20 Software Bundle 4.5.0   **1 Mar 2016**

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

NAME	DESCRIPTION
iSMA-B-AAC20 Ver 4.5.0: Release date 1 Mar 2016	**New Functionalities:** • added native methods to support BACnet Master IP; • added time and time zones settings via LCD, website and Modbus registers; • added UTC Time Synchronization service and UTC_OFFSET property in BACnet device (BACnet); • added BACnetMasterIP. **Improvements:** • added information about incorrect login or password and reduced web page size (web server); • improved stability of device in noisy environments; • NumberOfComponents slot in App component changed to read-only (Sys); • extended component name to 31 chars (using Niagara AX please upgrade Sedona.jar file) (Sys); • added SendValue action (ModbusAsync); • added SendValue action (ModbusTcpMaster); • added connection error status and fixed minor bugs (ModbusTcpMaster); • added MSV object (BACnetSlave); • added MultiStateWritable component (iSMA_platAAC20); • added Send action in command component (DALI). **Fixed Bugs:** • fixed unintended reboot when someone add a LCD component to AAC20 LED version.