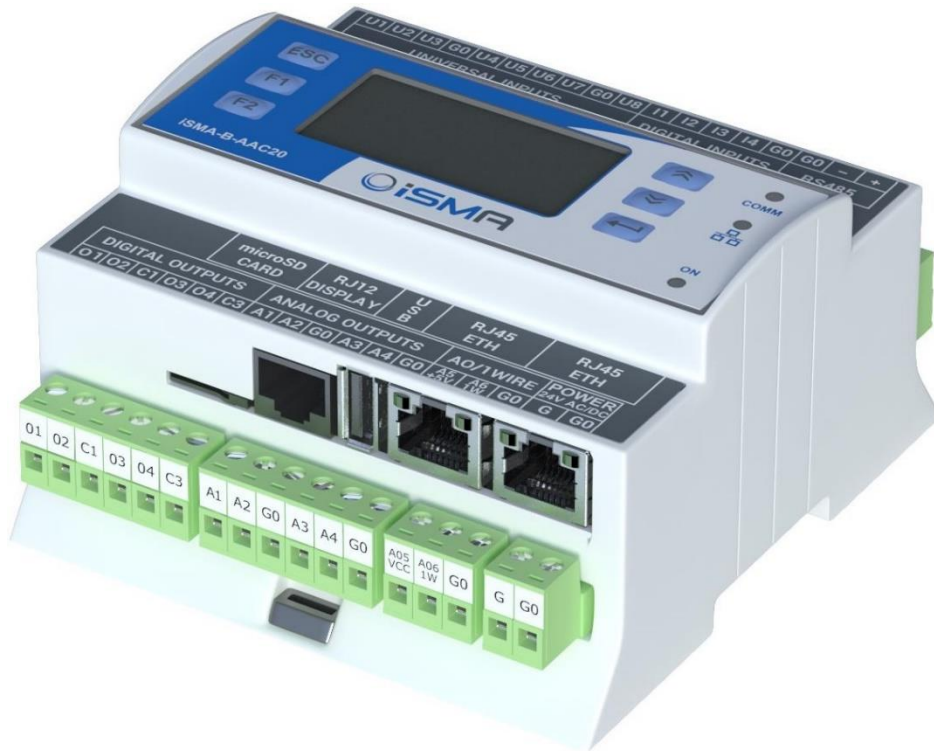


iSMA-B-AAC20

User Manual

iSMA Advance Control kit



Powered by
sedona
FRAMEWORK™

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1. Advance Control kit

This manual contains information about the Advance Control module of iSMA-B-AAC20 device.

Advance Control kit has been developed in order to facilitate composing of user applications. With this kit components an advanced application can be built in a simple way. This kit contains the following components:

- Riser Lower
- Dimmer Switch
- Action Trigger

1.1. Riser Lower component

This component has been created to simplify control of 3-point valve actuators. This component has the following functions:

- Analog input, work with PID regulators
- 2 Digital Outputs for 3-point direct control valve actuators
- Analog Output for 3-point control valve actuators by voltage level (additional device required)
- Midnight reset function to automatically adjust physical and virtual valve position

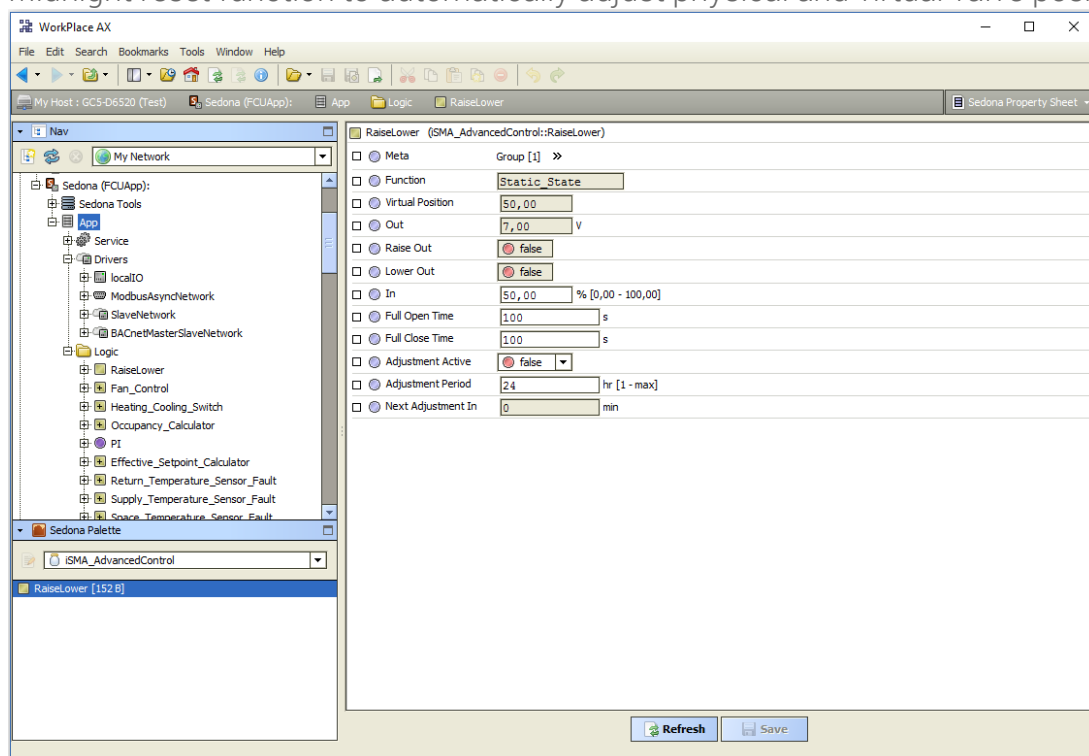


Figure 1 Riser Lower component view

The component has the following actions:

- Adjust – Valve adjustment procedure recall (adjusts physical and virtual valve position)

The component has following slots:

- Function – Current function description (Lower_State, Static_State, Raise_State, Adjustment_Opening, Adjustment_Closing)
- Virtual Position – Valve virtual position in %
- Out – Analog output out
- Rise Out – Digital output out for Rising function
- Rise Low – Digital output out for Lowing function
- In – Valve position demand
- Full Open Time – Time for valve position open in seconds
- Full Close Time – Time for valve position close in seconds
- Adjustment Active – Remote adjustment procedure trigger
- Adjustment Period – Adjustment procedure recall period in hours
- Next Adjustment In – Remaining time in minutes for next adjustment procedure

Out Value	Rise	Lower	Description
0	Off	Off	Off
4	Off	On	Lower
7	Off	Off	Static
10	On	Off	Rise

Table 1 Analog output voltage level function

1.2. Dimmer Switch

The component has been created to control light dimmer, with the use of single button (one digital input) or two buttons (two digital input).

In Single Switch mode Switch 1 has defined function for short and long press. The short press is when the button is pressed for less than the time defined in slot Short In. The long press is when the button is pressed for longer than the time defined in slot Short In. The short press is dedicated for On/Off switching, the long press is dedicated for changing dimming value. Each short press toggle between on and off state. During long press the component increases or decreases dimming value.

In Double Switch mode, each button has defined functions: Switch 1 is for switching on (short press) and increasing dimmer value (long press), Switch 2 is for switching off (short press) and decreasing dimmer value (long press). The short press is when high state time is less than time defined in Short In slot. The long press is when short time elapse, and button is still in high state.

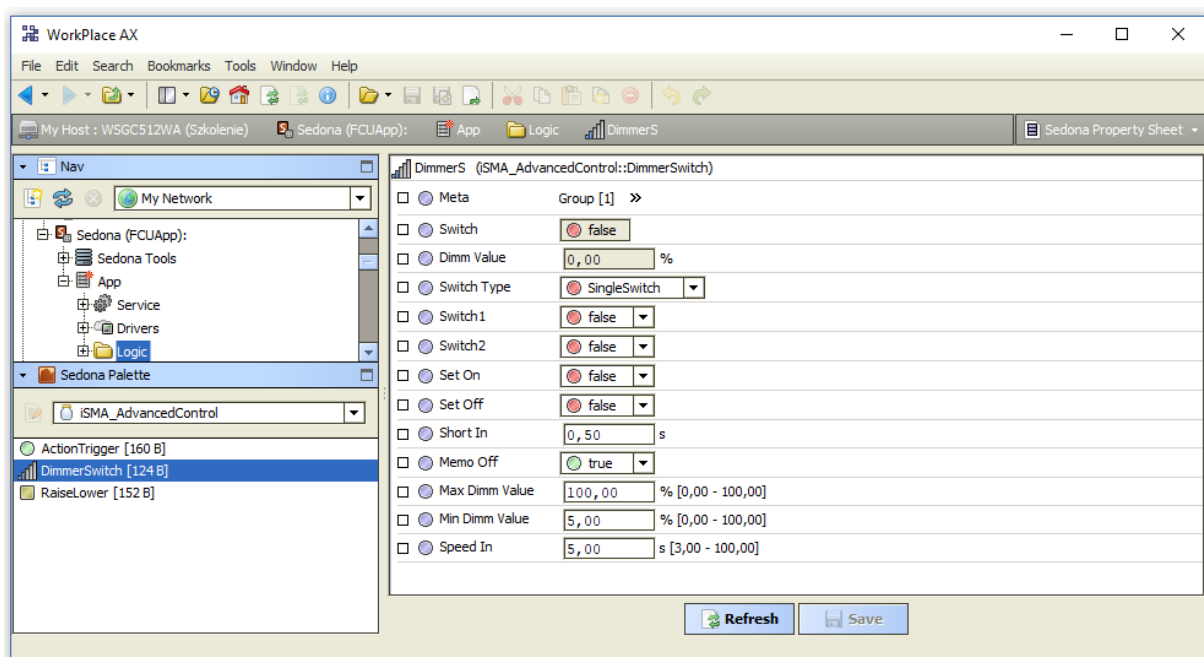


Figure 2 Dimmer Single Switch property sheet view

The component has the following slots:

- Switch – Out slot for dimmer, digital value for On and Off state
- Dimm Value – Out slot for dimmer, analog 0-100% value
- Switch Type – Button input
- Switch1 – Button input, main for Single Switch mode, On or increasing output in Double Switch mode

- Switch2 – Button input, not active for Single Switch mode, Off or decreasing output in Double Switch mode
- Set On – Trigger for switch dimmer to On state (to max level)
- Set Off – Trigger for switch dimmer to Off state
- Short In – Time for short button press
- Memo Off – Enable / Disable memory function of Dimm Value during switch off
- Max Dimm Value – Max. dimmer analog value,
- Min Dimm Value – Min. dimmer analog,
- Speed In – Dimming speed time.

1.3. Action Trigger

This component has been created to remotely recollect the action from Sedona component. Sedona does not allow to create links to component's actions and actions can be recalled manually from programming software (for example WorkPlace) or by dedicated component. The Action Trigger component has 3 inputs slots each dedicated to Sedona variable type (as a standard we use only one of them, corresponding to the component type). The programmes create link to component, from which the action will be recalled, to Action Trigger component input slot. The slot Action Name defines which action is to be recalled.

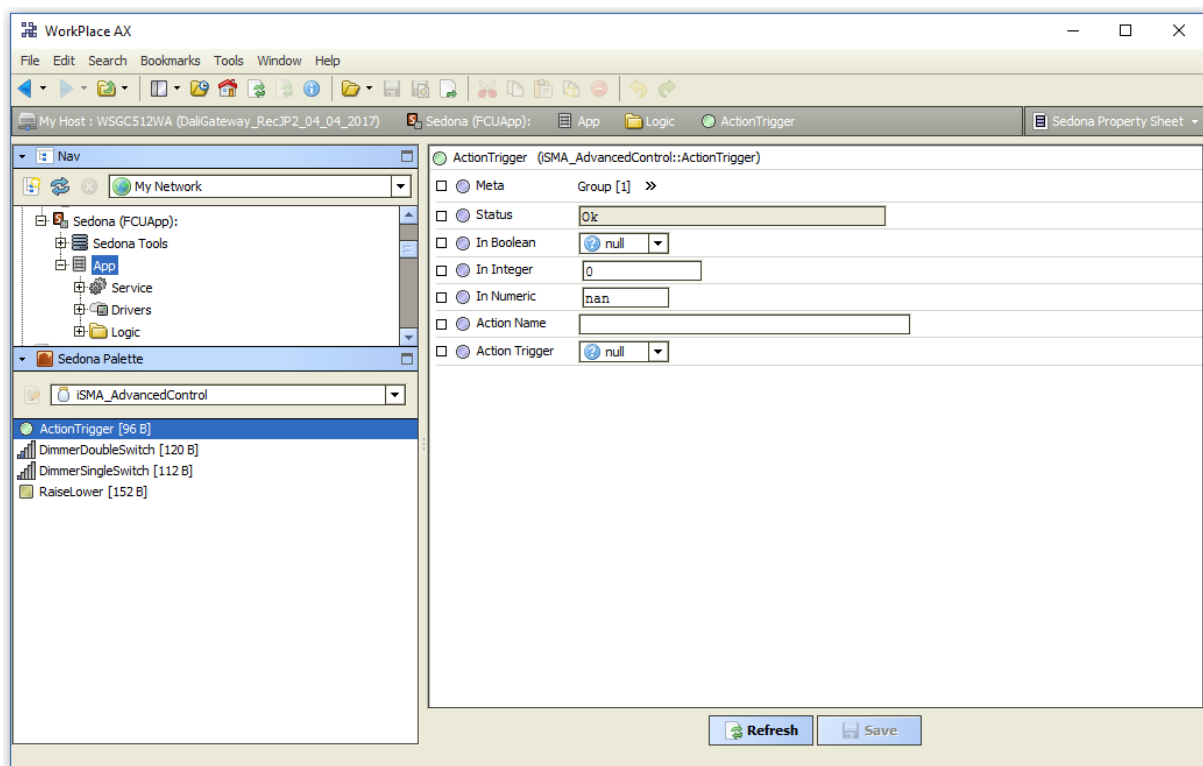


Figure 3 Action Trigger property sheet view

The component has the following actions:

- Action – Manually recalls action from linked component

The component has following slots:

- Status – Component status,
- In Boolean – Input slot to make link connection between components – Boolean type,
- In Integer – Input slot to make link connection between components – Integer type,
- In Numeric – Input slot to make link connection between components – Numeric/Float type,
- Action name – Action name from linked component which will be recalled,
- Action Trigger – Recall action from component linked to one of input slot, defined in Action Name.