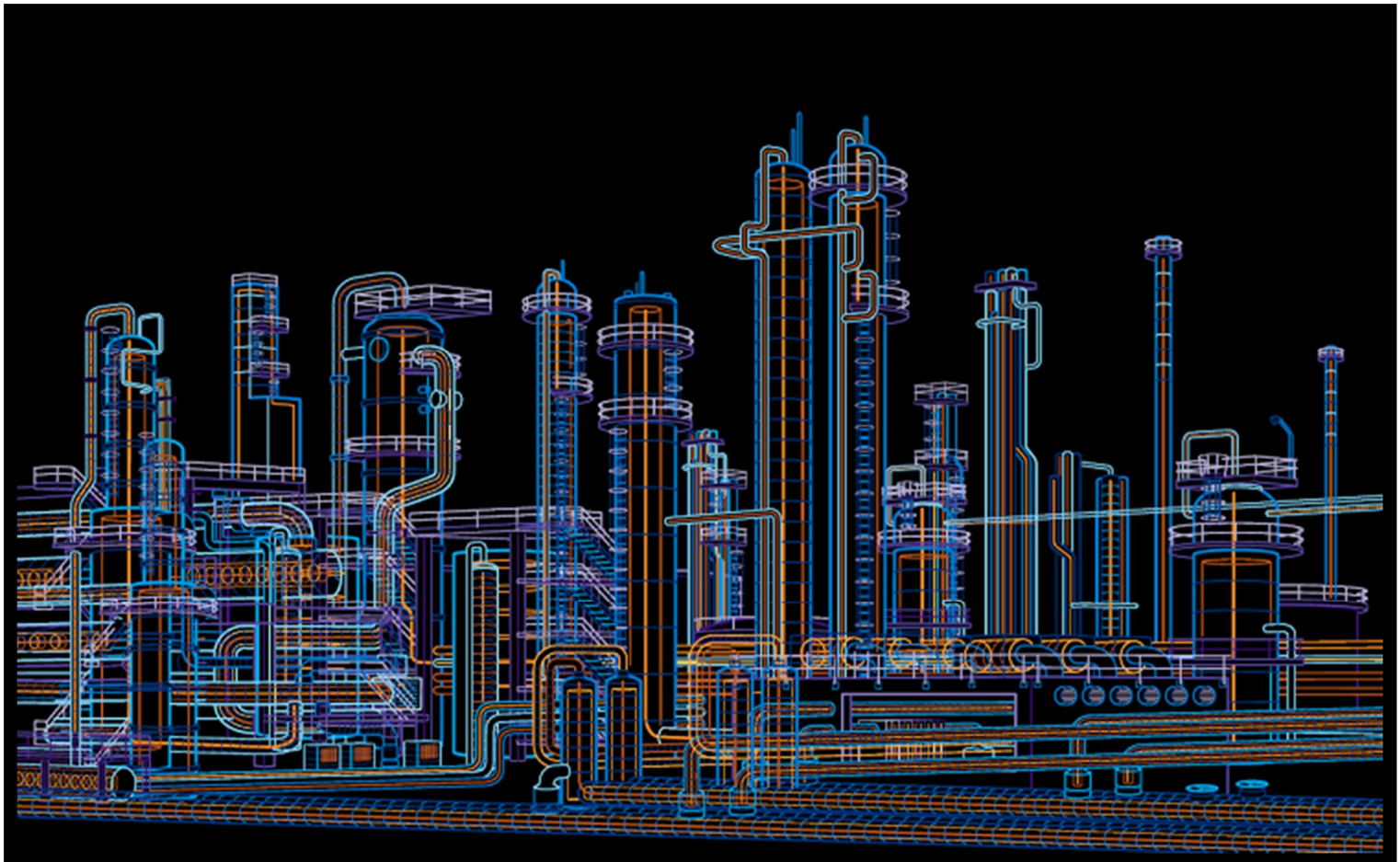

System 800xA
PC Toolkit Library for Melody
Human System Interface - Analog
User Manual

System Version 6.0

Power and productivity
for a better world™

Purpose

The purpose of this document is to describe the Human System Interface with Faceplates and Graphic Elements of the System 800xA with connectivity to Melody/AC870P. All elements are part of an 800xA System Extension, which will be used mainly in the Petrochemical Industry but also in other Process industries. This document defines the ABB Control System standards for the Human Machine Interface (HMI).

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Human System Interface (Classic Style)

1. ANMON – Analog Monitoring

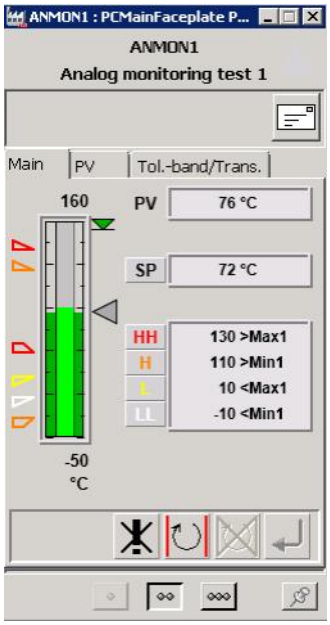


Figure: 1-1 Main View

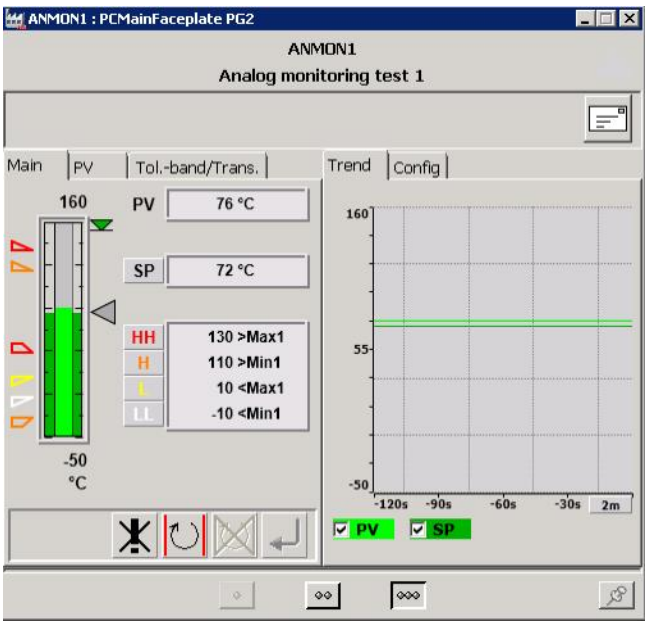


Figure: 1-2 Extended View

Basic information

Name:	**PCMainFaceplate**
Description:	PC MainFaceplate
Connect type:	Melody/AC870P
Object type:	Analog Monitor Process Industry
Library:	-
Min. required 800xA version:	SV5.1RevA
Graphics Builder version:	PG2

Table: 1-1 Basic Information

Layout

Parameter	**Value**
Update rate (ms)	1000
Default view	Faceplate
Faceplate orientation	Horizontal

Table: 1-2 Layout information

Sizing information

Parameter in pixels	Main View	Ext. View
Width	250 px	500 px
Height	424 px	424 px
MaxNoOfIndicatorRows	1	1
MaxNoOfIndicatorsRerRow	6	12
MaxNoOfButtonRows	0	0
MaxNoOfButtonPerRow	6	12

Table: 1-3 Sizing Information

Indicator and button icons are displayed on dedicated positions. Position 1 is the upper left corner. Position 12 is the lower right corner. Position 0 is not shown.

Elements

View	Aspect	Tab	NLS-ID	User role
Main	anmon_FE_Main PG2	1	NLSID_PC_Main	EveryOne
Main	anmon_FE_PV PG2	1	NLSID_PC_PV	EveryOne
Main	anmon_FE_TolTrans PG2	1	NLSID_PC_TolTrans	EveryOne
Ext	anmon_FE_Main PG2	1	NLSID_PC_Main	EveryOne
Ext	anmon_FE_PV PG2	1	NLSID_PC_PV	EveryOne
Ext	anmon_FE_TolTrans PG2	1	NLSID_PC_Trans	EveryOne
Ext	anmon_FE_Trend PG2	2	NLSID_Trend	EveryOne
Ext	anmon_FE_Config PG2	2	NLSID_PC_Config	EveryOne

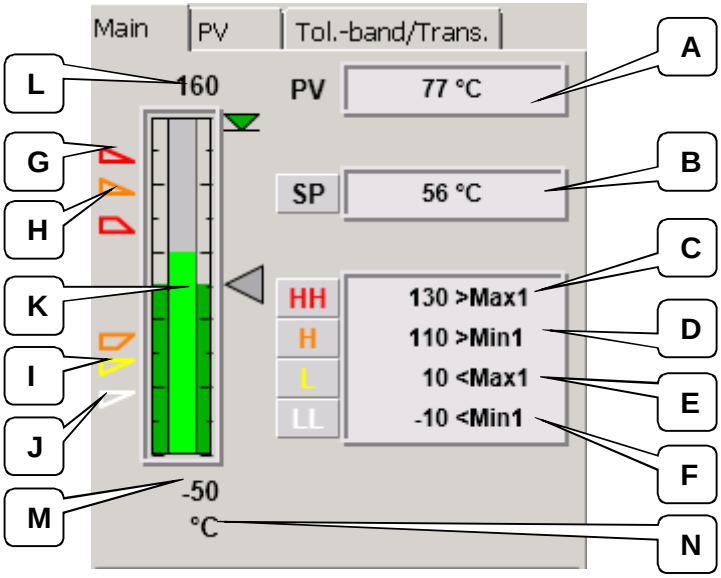
Table: 1-4 Faceplate Aspect names

1.1 Faceplate elements

1.1.1 anmon_FE_Main PG2

This is the main view for the Analog Monitor Procces Industry object type faceplate. Operator input is possible and based on access rights to the signals.

Note: The input from bar graph is targeting set point value.



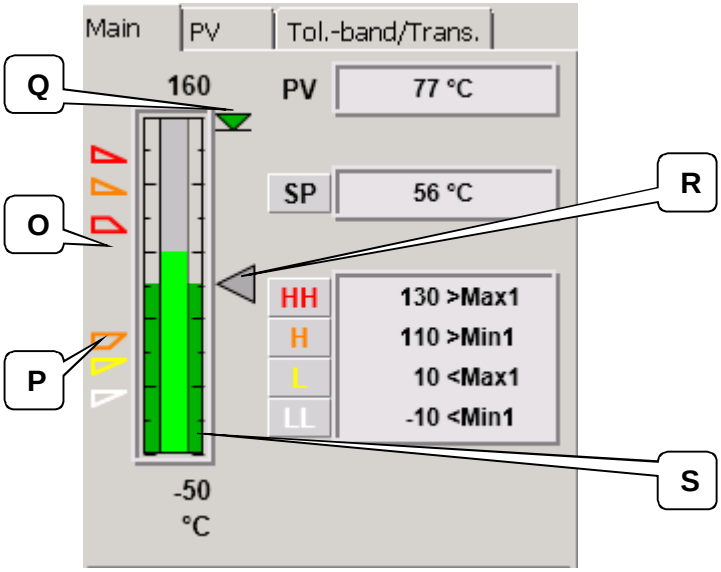


Figure: 1-3 Main Tab

ID	Comment	Property
A	Monitored value	Y/SIG
B	Setpoint value (visible if available)	WY/SIG
C	High-high limit	AHHX/SIG
D	High limit	AHX/SIG

ID	Comment	Property
E	Low limit	ALX/SIG
F	Low-low limit	ALLX/SIG
G	High-high limit	AHHX/SIG
H	High limit	AHX/SIG
I	Low limit	ALX/SIG
J	Low-low limit	ALLX/SIG
K	Monitored value	Y/SIG
L	Max range of output value	Y/HIGH
M	Min range of output value	Y/LOW
N	Unit string of output value	Y/UNITS
O	High deviation limit	AHDX/SIG + WY/SIG
P	Low deviation limit	ALDX/SIG + WY/SIG
Q	Setpoint high limit - visible if is lower than max range (and/or setpoint low limit - - visible if is higher than min range)	WY/HIGH WY/LOW
R	Input of setpoint value	WY/SIG
S	Setpoint value	WY/SIG

Table: 1-5 Classic Faceplate Main tab Description

1.1.2 anmon_FE_PV PG2

This is the process value overview for the Analog Monitor Process Industry object type faceplate. Operator input is possible and based on access rights to the signals.

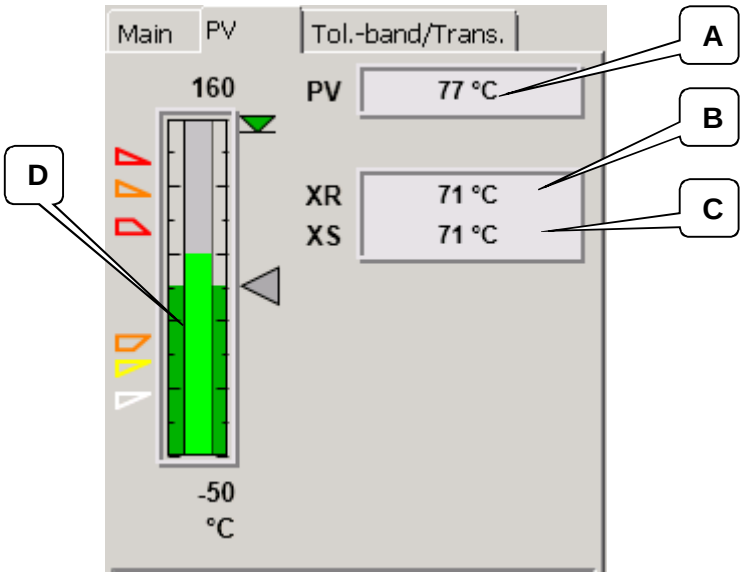


Figure: 1-4 PV Tab

ID	Comment	Property
A	Monitored process value	Y/SIG
B	Raw value	XRY/SIG
C	Value after substitution	XSUY/SIG
D	Bar graph presentation – refer to description of Main tab	-

Table: 1-6 Classic Faceplate PV tab Description

1.1.3 anmon_FE_TolTrans PG2

This is the tolerance and transient limits overview for the Analog Monitor Process Industry object type faceplate. Operator input is possible and based on access rights to the signals.

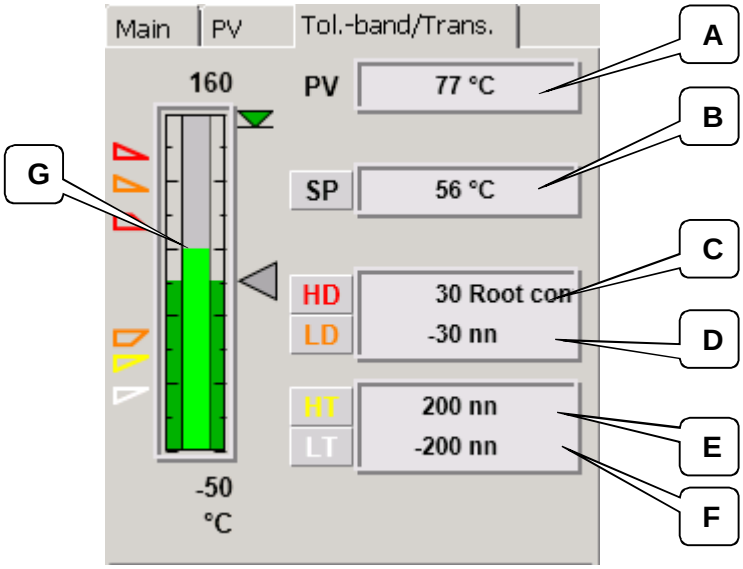


Figure: 1-5 TolTrans Tab

ID	Comment	Property
A	Monitored process value	Y/SIG
B	Setpoint value (visible only if used)	WY/SIG
C	High deviation limit	AHDX/SIG
D	Low deviation limit	ALDX/SIG
E	High transient limit	AHTX/SIG
F	Low transient limit	ALTX/SIG
G	Bar graph presentation – refer to description of Main tab	-

Table: 1-7 Classic Faceplate TolTrans tab Description

1.1.4 anmon_FE_Trend PG2

This is the trend view for the Analog Monitor Process Industry object type faceplate.

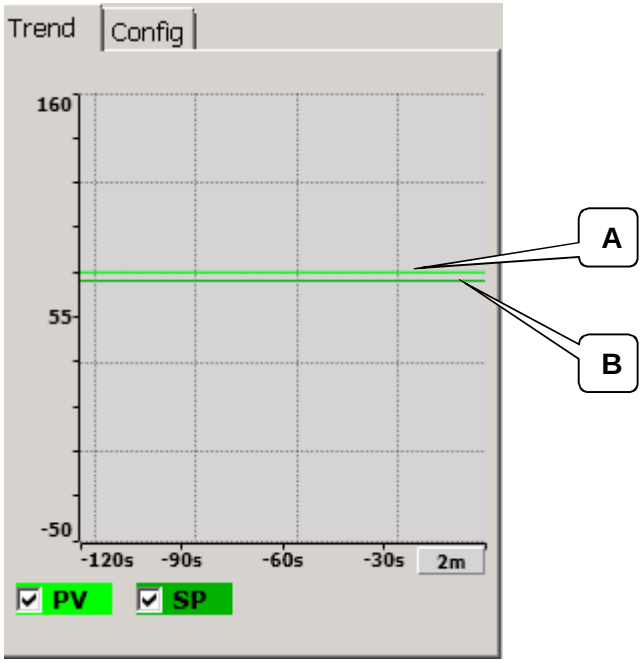


Figure: 1-6 Trend Tab

ID	Comment	Property
A	Monitored process value (“PV”)	Y/SIG
B	Setpoint value (“SP”). Visible only if configured	WY/SIG

Table: 1-8 Classic Faceplate Trend tab Description

1.1.5 anmon_FE_Config PG2

Operation Lock and Manual Inhibit Write Permissions

The Melody faceplates' configuration tab allows checking **Operation Lock** in order to inhibit operator inputs. All buttons will be grayed out. Refer to document 3BDA033456R51xx Installation and Configuration in order to change the default write permission.

Manual Inhibit can be selected to manually inhibit all alarms of this Melody tag.

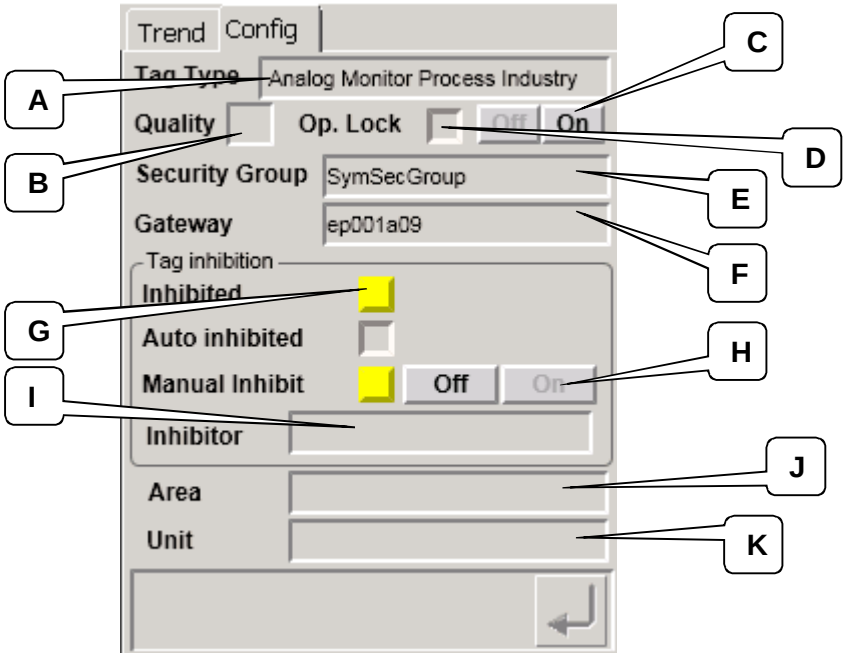


Figure: 1-7 Config Tab

ID	Comment	Property
A	Text describing the type of the tag	TYPE
B	Character which is providing Melody quality information	QUALITY
C	Buttons allow to switch Operating Lock on and off	On: AKO/SIG Off: AKOR/SIG
D	Binary indicator Yellow color: Op. Lock is On Gray color: Op. Lock is Off	AKO/SIG
E	Text describing the Melody security group to which this tag belongs	SECNAME
F	Text describing the Melody gateway to which this tag belongs	GATEWAY
G	Binary indicators are showing inhibition status (Yellow color = On)	INHB INHBAUTO INHBMAN

ID	Comment	Property
H	Buttons allow to manually inhibit the tag	INHBMAN
I	Information about inhibitor	INHBTAG
J	Text describing Melody area to which tag belongs	AREA
K	Text describing Melody unit to which tag belongs	UNIT

Table: 1-9 Classic Faceplate Config tab Description

1.2 Indicators

Icon	Description	Property (Value)	Position		
			Red	FP	Ext
	Alternative value	ATO/SIG	1	1	1
	Set force	Y/SIG:Q=216	1	1	1
	Alarm disabled	(AHHY/ALI<>"" and AHHN/SIG and AHHY/EN) or (AHY/ALI<>"" and AHN/SIG and AHY/EN) or (ALY/ALI<>"" and ALN/SIG and ALY/EN) or (ALLY/ALI<>"" and ALLN/SIG and ALLY/EN) or (AHDY/ALI<>"" and AHDN/SIG and AHDY/EN) or (ALDY/ALI<>"" and ALDN/SIG and ALDY/EN) or (AHTY/ALI<>"" and AHTN/SIG and AHTY/EN) or (ALTY/ALI<>"" and ALTN/SIG and ALTY/EN)	2	2	2
	Operator lock	AKO/SIG	5	5	10
	Operator note available		0	0	11

Table: 1-10 Indicators

1.3 Aspect Links

Icon	Description	Aspect	Position		
			Red	FP	Ext
	Operator note	Operator note	6	6	12

Table: 1-11 Aspect Links

1.4 Faceplate Buttons

Icon	Description	Property (Value)	Position		
			Red	FP	Ext
	Reset the substitution value	SUO/SIG	3	3	3
	Switch to alternative value	ATO/SIG	4	4	4
	Switch from alternative value to input value	ATOR/SIG	5	5	5
	Apply the selected action	-	6	6	6

Table: 1-12 Faceplate Buttons

1.5 Graphic Elements

The following Graphic Elements have the following standard properties and enumeration.

Standard properties

Property	Data type	Default value	Description
EnableInput	Boolean	True	Enables input handling of the element, if false the element it self can't selected.
Name	String	-	Name of the element instance in a graphic display. Is set automatically by the Graphics Builder (Name of the element + index).
Rotation	Rotation	0	Rotation angle
SubscriptionRate	Integer	0	Update rate for all properties subscribed for
Transform	Transform	Empty	Enables animation like scaling, moving and rotation. It is intended only for dynamic values.
Visible	Boolean	True	Visibility of the element in the graphic display.
XPos	Float	-	X position of the upper left corner of the element
YPos	Float	-	Y position of the upper left corner of the element

Table: 1-13 Standard Properties for all Graphic Elements

Graphic Elements based on Melody object type Analog Monitoring

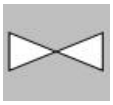
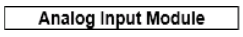
Example	Graphic Element Name	Description
	anmon_bargraph_PG2	Bar graph displaying analog input value.
	anmon_valve_PG2	Mode icon: Valve
	anmon_limit_text_ahy_PG2	Limit indicator text box “High” displaying either the status text 0 or 1 as defined in the graphic element’s property.
	anmon_limit_text_ahhy_PG2	Limit indicator text box “HighHigh” displaying either the status text 0 or 1 as defined in the graphic element’s property.
	anmon_limit_text_aly_PG2	Limit indicator text box “Low” displaying either the status text 0 or as defined in the graphic element’s property.
	anmon_limit_text_ally_PG2	Limit indicator text box “LowLow” displaying either the status text 0 or 1 as defined in the graphic element’s property.
	anmon_numeric_PG2	Indicator text box with numeric formatting. For example displaying the real input values or limit values.
	anmon_description_PG2	Indicator text box displaying the description (Melody “Long text”) of the monitoring function.

Table 1-1: Melody ANMON – Analog Monitoring

2. ANOUT – Analog Output

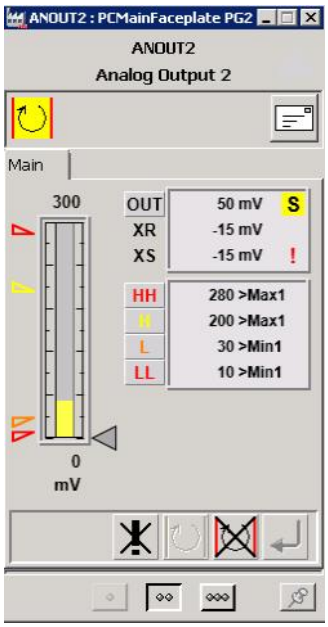


Figure: 2-1 Faceplate View

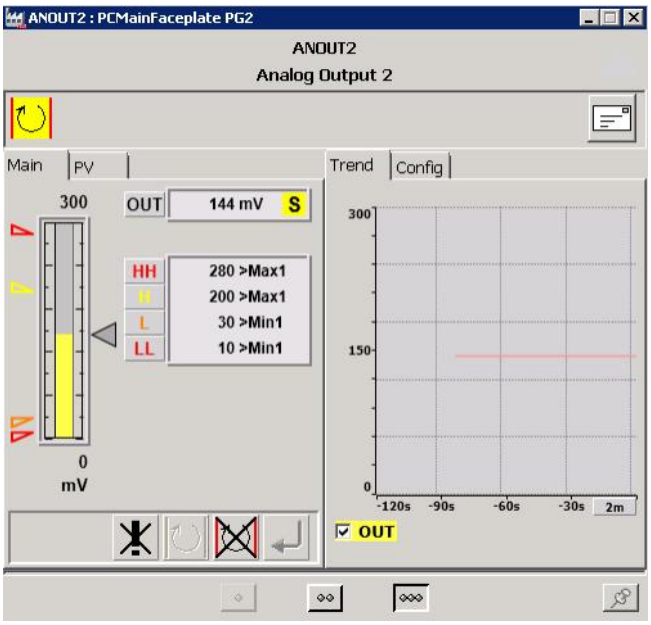


Figure: 2-2 Extended View

Basic information

Name:	PCMainFaceplate
Description:	PC MainFaceplate
Connect type:	Melody/AC870P
Object type:	Analog Output
Library:	-
Min. required 800xA version:	SV5.1RevA
Graphics Builder version:	PG2

Table: 2-1 Basic Information

Layout

Parameter	**Value**
Update rate (ms)	1000
Default view	Faceplate
Faceplate orientation	Horizontal

Table: 2-2 Layout information

Sizing information

Parameter in pixels	Main View	Ext. View
Width	250 px	500 px
Height	424 px	424 px
MaxNoOfIndicatorRows	1	1
MaxNoOfIndicatorsRerRow	6	12
MaxNoOfButtonRows	0	0
MaxNoOfButtonPerRow	6	12

Table: 2-3 Sizing Information

Indicator and button icons are displayed on dedicated positions. Position 1 is the upper left corner. Position 12 is the lower right corner. Position 0 is not shown.

Elements

View	Aspect	Tab	NLS-ID	User role
Main	anout_FE_Main PG2	1	NLSID_PC_Main	EveryOne
Ext	anout_FE_Main PG2	1	NLSID_PC_Main	EveryOne
Ext	anout_FE_Trend PG2	2	NLSID_PC_Trend	EveryOne
Ext	anout_FE_Config PG2	2	NLSID_PC_Config	EveryOne

Table: 2-4 Faceplate Aspect names

2.1 Faceplate Elements

2.1.1 anout_FE_Main PG2

This is the main view for the Analog Output object type faceplate. Operator input is possible and based on access rights to the signals.

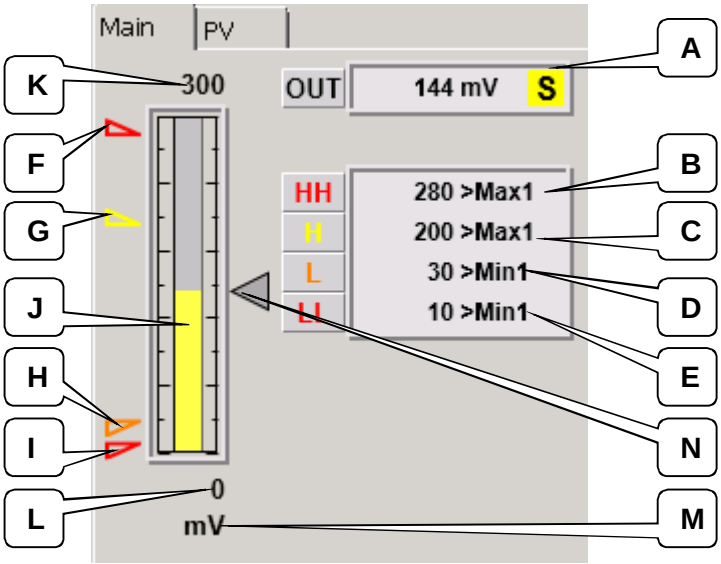


Figure: 2-3 Main Tab

ID	Comment	Property
A	Output value	Y/SIG
B	High-high limit	AHHX/SIG
C	High limit	AHX/SIG
D	Low limit	ALX/SIG
E	Low-low limit	ALLX/SIG
F	High-high limit	AHHX/SIG
G	High limit	AHX/SIG
H	Low limit	ALX/SIG
I	Low-low limit	ALLX/SIG
J	Output value	Y/SIG
K	Max range of output value	Y/HIGH
L	Min range of output value	Y/LOW
M	Unit string of output value	Y/UNITS
N	Input of output value	ATV/SIG

Table: 2-5 Classic Faceplate Main Tab Description

2.1.2 anout_FE_PV PG2

This is the process value view for the Analog Output object type faceplate. Operator input is possible and based on access rights to the signals.

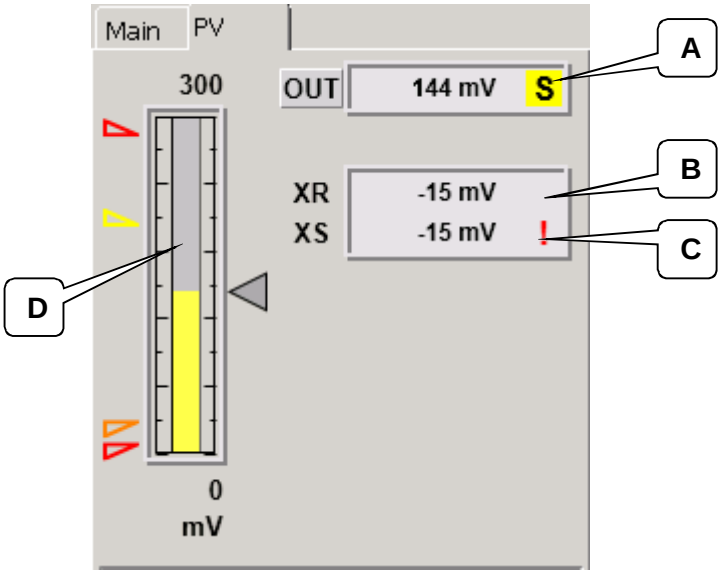


Figure: 2-4 PV Tab

ID	Comment	Property
A	Output value	Y/SIG
B	Hardware (raw) value	XRY/SIG
C	Substitute value	XSUY/SIG
D	Bar graph indication, refer to description of Main tab	-
E	Buttons area – refer to ‘Buttons’ section	-

Table: 2-6 Classic Faceplate PV Tab Description

2.1.3 anout_FE_Trend PG2

This is the trend view for the Analog Output object type faceplate.

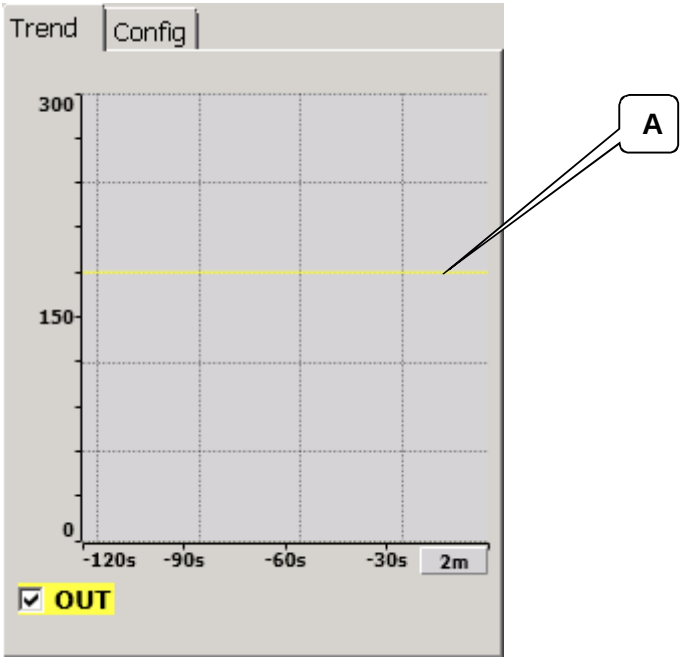


Figure: 2-5 Trend Tab

ID	Comment	Property
A	Indication of output value (“OUT”)	Y/SIG

Table: 2-7 Classic Faceplate Trend Tab Description

2.1.4 anout_FE_Config PG2

Operation Lock and Manual Inhibit Write Permissions

The Melody faceplates' configuration tab allows checking **Operation Lock** in order to inhibit operator inputs. All buttons will be grayed out. Refer to document 3BDA033456R51xx Installation and Configuration in order to change the default write permission.

Manual Inhibit can be selected to manually inhibit all alarms of this Melody tag.

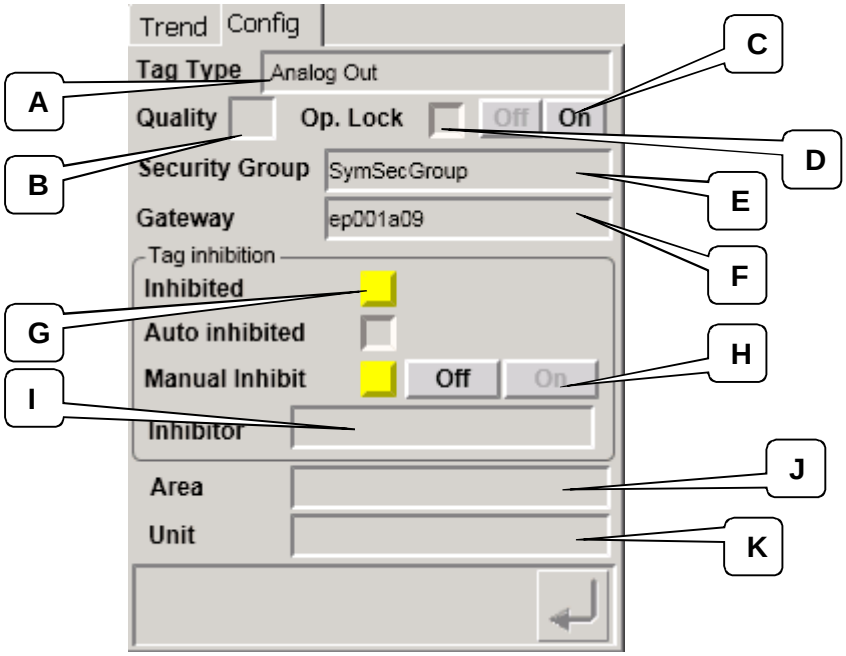


Figure: 2-6 Config Tab

ID	Comment	Property
A	Text describing the type of the tag	TYPE
B	Character which is providing Melody quality information	QUALITY
C	Buttons allow to switch Operating Lock on and off	On: AKO/SIG Off: AKOR/SIG
D	Binary indicator Yellow color: Op. Lock is On Gray color: Op. Lock is Off	AKO/SIG
E	Text describing the Melody security group to which this tag belongs	SECNAME
F	Text describing the Melody gateway to which this tag belongs	GATEWAY
G	Binary indicators are showing inhibition status (Yellow color = On)	INHB INHBAUTO INHBMAN
H	Buttons allow to manually inhibit the tag	INHBMAN

ID	Comment	Property
I	Information about inhibitor	INHBTAG
J	Text describing Melody area to which tag belongs	AREA
K	Text describing Melody unit to which tag belongs	UNIT

Table: 2-8 Classic Faceplate Config tab Description

2.2 Indicators

Icon	Description	Property (Value)	Position		
			Red	FP	Ext
	Alternative value	ATO/SIG	1	1	1
	Forced	Y/SIG:Q=216	1	1	1
	Alarm disabled	(AHHY/ALI<>"" and AHHN/SIG and AHHY/EN) or (AHY/ALI<>"" and AHN/SIG and AHY/EN) or (ALY/ALI<>"" and ALN/SIG and ALY/EN) or (ALLY/ALI<>"" and ALLN/SIG and ALLY/EN)	2	2	2
	Operation lock	AKO/SIG	5	5	10
	Operator note available		-	0	11

Table: 2-9 Indicators

2.3 Aspect Links

Icon	Description	Aspect	Position		
			Red	FP	Ext
	Operator note	Operator note	6	6	12

Table: 2-10 Aspect Links

2.4 Faceplate Buttons

Icon	Description	Property (Value)	Position		
			Red	FP	Ext
	Reset the substitution value	SUO/SIG	3	3	3
	Switch to alternative value	ATO/SIG	4	4	4
	Switch from alternative value to input value	ATOR/SIG	5	5	5

Icon	Description	Property (Value)	Position		
			Red	FP	Ext
	Apply the selected action	-	6	6	6

Table: 2-11 Faceplate Buttons

2.5 Graphic Elements

The following Graphic Elements have the following standard properties and enumeration.

Standard properties

Property	Data type	Default value	Description
EnableInput	Boolean	True	Enables input handling of the element, if false the element it self can't selected.
Name	String	-	Name of the element instance in a graphic display. Is set automatically by the Graphics Builder (Name of the element + index).
Rotation	Rotation	0	Rotation angle
SubscriptionRate	Integer	0	Update rate for all properties subscribed for
Transform	Transform	Empty	Enables animation like scaling, moving and rotation. It is intended only for dynamic values.
Visible	Boolean	True	Visibility of the element in the graphic display.
XPos	Float	-	X position of the upper left corner of the element
YPos	Float	-	Y position of the upper left corner of the element

Table: 2-12 Standard Properties for all Graphic Elements

Graphic Elements based on Melody object type Analog Output

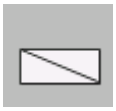
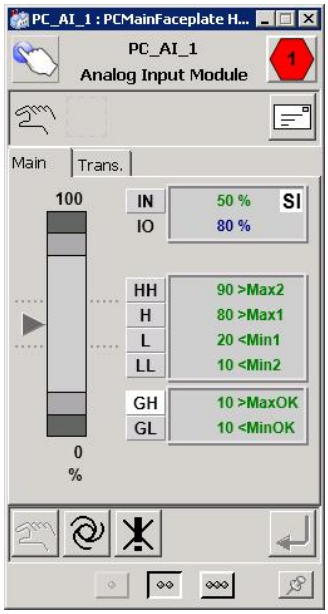
Example	Graphic Element Name	Description
	anout_valve_PG2	Mode icon: Valve
	anout_numeric_PG2	Indicator text box with numeric formatting. Displaying the real output value Y
	anout_flap_PG2	Mode icon: Flap

Table 2-1: Melody ANOUT – Analog Output GE

Human System Interface (High Performance Style)

3. ANMON – Analog Monitoring



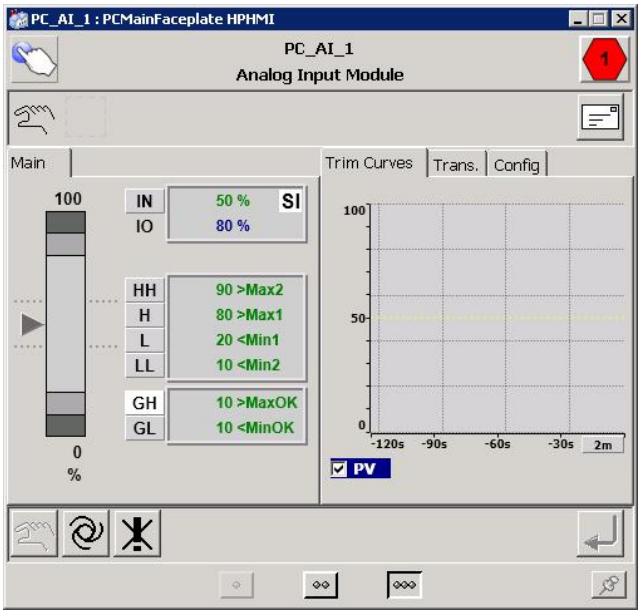


Figure: 3-1 Main View *Figure: 3-2 Extended View*

Basic information

Name:	**PCMainFaceplateHPHMI**
Description:	PC HPHMI Main Faceplate
Connect type:	Melody/AC870P
Object type:	Analog Monitor Process Industry
Library:	PCHighPerformanceHMILib 1.0-0
Min. required 800xA version:	SV5.1RevA
Graphics Builder version:	PG2

Table: 3-1 Basic Information

Layout

Parameter	**Value**
Update rate (ms)	1000
Default view	Faceplate
Faceplate orientation	Horizontal
Reduced View	Not available

Table: 3-2 Layout information

Sizing information

Parameter in pixels	Main View	Ext. View
Width	250 px	500 px
Height	424 px	424 px
MaxNoOfIndicatorRows	1	1
MaxNoOfIndicatorsRerRow	6	12
MaxNoOfButtonRows	1	1
MaxNoOfButtonPerRow	6	12

Table: 3-3 Sizing Information

Indicator and button icons are displayed on dedicated positions. Position 1 is the upper left corner. Position 12 is the lower right corner. Position 0 is not shown.

Elements

View	Aspect	Tab	NLS-ID	User role
Main	anmon_FE_HPHMI_Main	1	NLSID_PC_Main	EveryOne
Main	anmon_FE_HPHMI_Trans	1	NLSID_PC_Trans	EveryOne
Ext	anmon_FE_HPHMI_Main	1	NLSID_PC_Main	EveryOne
Ext	anmon_FE_HPHMI_Trend	2	NLSID_TrimCurves	EveryOne
Ext	anmon_FE_HPHMI_Trans	2	NLSID_PC_Trans	EveryOne
Ext	anmon_FE_HPHMI_Config	2	NLSID_Parameters	EveryOne

Table: 3-4 Faceplate Aspect names

3.1 Faceplate elements

3.1.1 anmon_FE_HPHMI_Main

This is the main view for the Analog Monitor Process Industry object type faceplate. Operator input is possible and based on access rights to the signals.

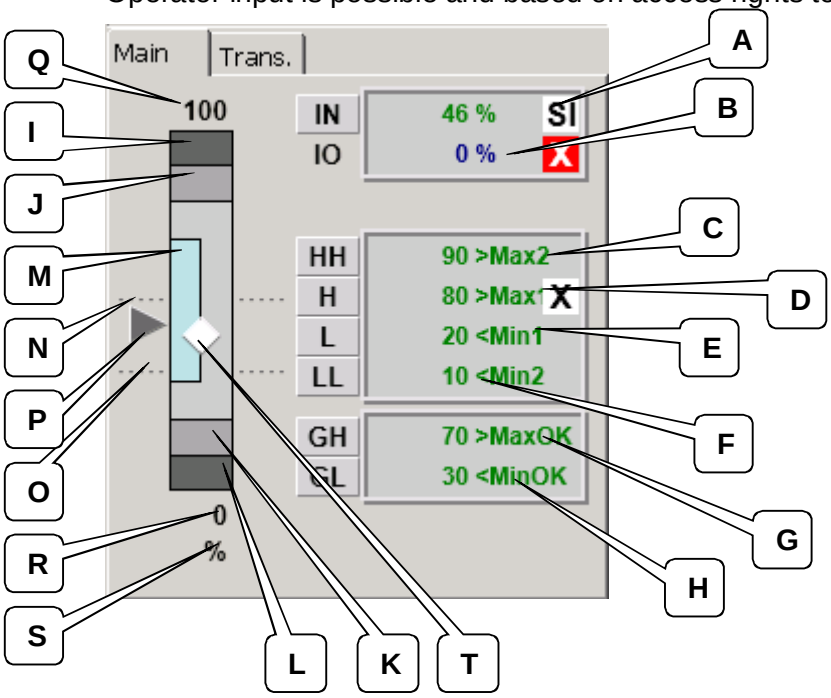


Figure: 3-3 Main Tab

ID	Comment	Property
A	Monitored process value	Y/SIG
B	Raw value	XR/SIG
C	Limit HH	AHHX/SIG
D	Limit H	AHX/SIG
E	Limit L	ALX/SIG
F	Limit LL	ALLX/SIG
G	Normal Max value	PC Additional Limits:GH.Value
H	Normal Min value	PC Additional Limits:GL.Value
I	Limit HH	AHHX/SIG
J	Limit H	AHX/SIG
K	Limit L	ALX/SIG
L	Limit LL	ALLX/SIG
M	Normal Range	PC Additional Limits:GH.Value PC Additional Limits:GL.Value
N	High deviation limit	AHDX/SIG
O	Low deviation limit	ALDX/SIG

ID	Comment	Property
P	Monitored process value	Y/SIG
Q	High range of process value	Y/HIGH
R	Low range of process value	Y/LOW
S	Unit string of process value	Y/UNITS
T	Setpoint (visible if configured)	WY/SIG

Table: 3-5 HPHMI Faceplate Main tab Description

3.1.2 anmon_FE_HPHMI_Trend

This is the Trim curves view for the Analog Monitor Process Industry object type faceplate.

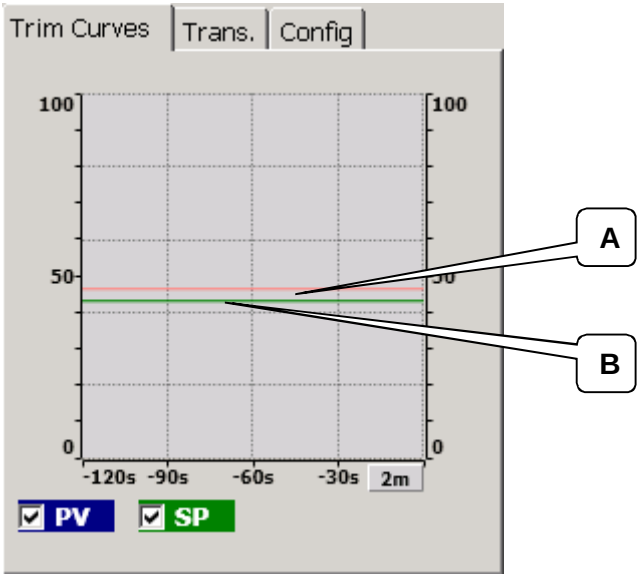


Figure: 3-4 TrimCurve Tab

ID	Comment	Property
A	Monitored process value (“PV”)	Y/SIG
B	Setpoint value (“SP”). Visible only if configured	WY/SIG

Table: 3-6 HPHMI Faceplate TrimCurve tab Description

3.1.3 anmon_FE_HPHMI_Trans

This is the deviation and transient limits view for the Analog Monitor Process Industry object type faceplate. Operator input is possible and based on access rights to the signals.

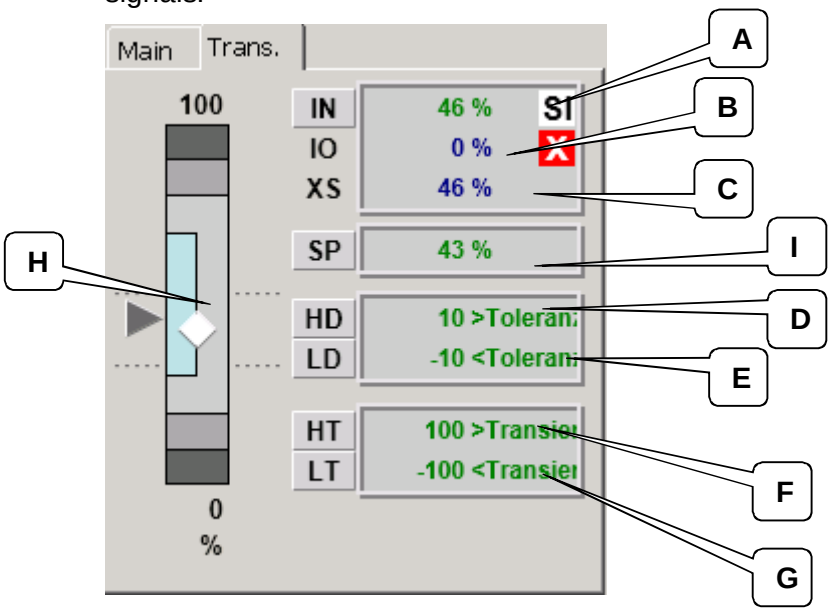


Figure: 3-5 Main Tab

ID	Comment	Property
A	Monitored process value	Y/SIG
B	Raw value	XRY/SIG
C	Value after substitution	XSUY/SIG
D	High deviation limit	AHDX/SIG
E	Low deviation limit	ALDX/SIG
F	High transient limit	AHTX/SIG
G	Low transient limit	ALTX/SIG
H	Bar graph presentation – refer to description of Main tab	
I	Setpoint (visible only if configured)	WY/SIG

Table: 3-7 HPHMI Faceplate Trans. tab Description

3.1.4 anmon_FE_HPHMI_Config

Operation Lock and Manual Inhibit Write Permissions

The Melody faceplates' configuration tab allows checking **Operation Lock** in order to inhibit operator inputs. All buttons will be grayed out. Refer to document 3BDA033456R51xx Installation and Configuration in order to change the default write permission.

Manual Inhibit can be selected to manually inhibit all alarms of this Melody tag.

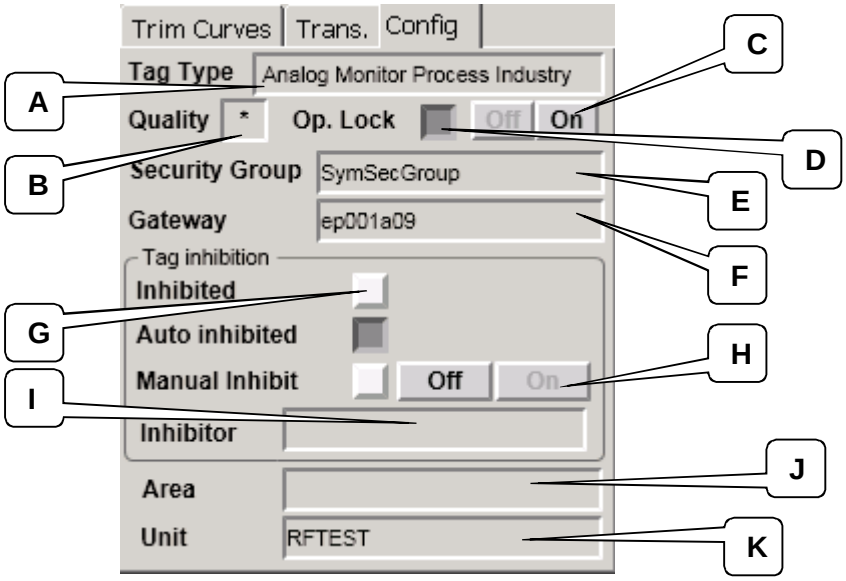


Figure: 3-6 HPHMI Faceplate Config Tab

ID	Comment	Property
A	Text describing the type of the tag	TYPE
B	Character which is providing Melody quality information	QUALITY
C	Buttons allow to switch Operating Lock on and off	On: AKO/SIG Off: AKOR/SIG
D	Binary indicator White color: Op. Lock is On Gray color: Op. Lock is Off	AKO/SIG
E	Text describing the Melody security group to which this tag belongs	SECNAME
F	Text describing the Melody gateway to which this tag belongs	GATEWAY
G	Binary indicators are showing inhibition status (white color = On)	INHB INHBAUTO INHBMAN
H	Buttons allow to manually inhibit the tag	INHBMAN
I	Information about inhibitor	INHBTAG

ID	Comment	Property
J	Text describing Melody area to which tag belongs	AREA
K	Text describing Melody unit to which tag belongs	UNIT

Table: 3-8 HPHMI Faceplate Config tab Description

3.2 Indicators

Icon	Description	Property (Value)	Position		
			Red	FP	Ext
	Manual mode	ATO/SIG	-	1	1
	Automatic mode	not ATO/SIG	-	1	1
	Set force	Y/SIG:Q=216	-	2	2
	Alarm disabled	(AHHY/ALI<>"" and AHHN/SIG and AHHY/EN) or (AHY/ALI<>"" and AHN/SIG and AHY/EN) or (ALY/ALI<>"" and ALN/SIG and ALY/EN) or (ALLY/ALI<>"" and ALLN/SIG and ALLY/EN) or (AHDY/ALI<>"" and AHDN/SIG and AHDY/EN) or (ALDY/ALI<>"" and ALDN/SIG and ALDY/EN) or (AHTY/ALI<>"" and AHTN/SIG and AHTY/EN) or (ALTY/ALI<>"" and ALTN/SIG and ALTY/EN)	-	3	3
	Operator lock	AKO/SIG	-	5	10
	Operator note available		-	0	11

Table: 3-9 Indicators

3.3 Aspect Links

Icon	Description	Aspect	Position		
			Red	FP	Ext
	Operator note	Operator note	-	6	12

Table: 3-10 Aspect Links

3.4 Faceplate Buttons

Icon	Description	Property (Value)	Position		
			Red	FP	Ext
	Set manual mode	ATO/SIG	-	1	1
	Set automatic mode	ATOR/SIG	-	2	2
	Reset the substitution value	SUO/SIG	-	3	3
	Apply the selected action	-	-	6	12

Table: 3-11 Faceplate Buttons

3.5 Graphic Elements

The following Graphic Elements have the following standard properties and enumeration.

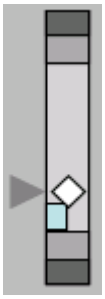
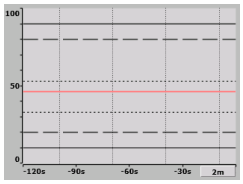
Standard properties

Property	Data type	Default value	Description
EnableInput	Boolean	True	Enables input handling of the element, if false the element it self can't selected.
Name	String	-	Name of the element instance in a graphic display. Is set automatically by the Graphics Builder (Name of the element + index).
Rotation	Rotation	0	Rotation angle
SubscriptionRate	Integer	0	Update rate for all properties subscribed for
Transform	Transform	Empty	Enables animation like scaling, moving and rotation. It is intended only for dynamic values.
Visible	Boolean	True	Visibility of the element in the graphic display.
XPos	Float	-	X position of the upper left corner of the element

Property	Data type	Default value	Description
YPos	Float	-	Y position of the upper left corner of the element

Table: 3-12 Standard Properties for all Graphic Elements

Graphic Elements based on Melody object type Analog Monitoring

Example	Graphic Element Name	Description
	anmon_HPHMI_AlarmInd	Alarm indication
	anmon_HPHMI_bargraph	Bargraph indication
	anmon_HPHMI_trend	Trend indication (signal Y)
	anmon_HPHMI_limit_text_ahy	Text indication based on binary signal (active HH limit)
	anmon_HPHMI_limit_text_ahhy	Text indication based on binary signal (active H limit)
	anmon_HPHMI_limit_text_aly	Text indication based on binary signal (active L limit)
	anmon_HPHMI_limit_text_ally	Text indication based on binary signal (active LL limit)
	anmon_HPHMI_numeric	Numeric indication (signal Y)

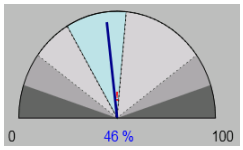
Example	Graphic Element Name	Description
	anmon_HPHMI_valve	Valve symbol based on analog value (signal Y)
	anmon_HPHMI_SuppressInd	Alarm suppression indication
	anmon_HPHMI_voltmeter	Voltmeter indication

Table 3-1: Melody ANMON – Analog Monitoring

4. ANOUT – Analog Output

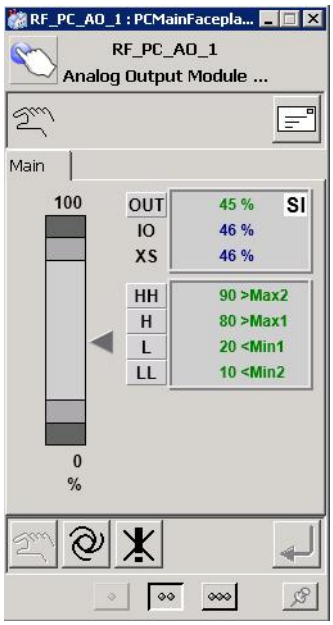


Figure: 4-1 Main View

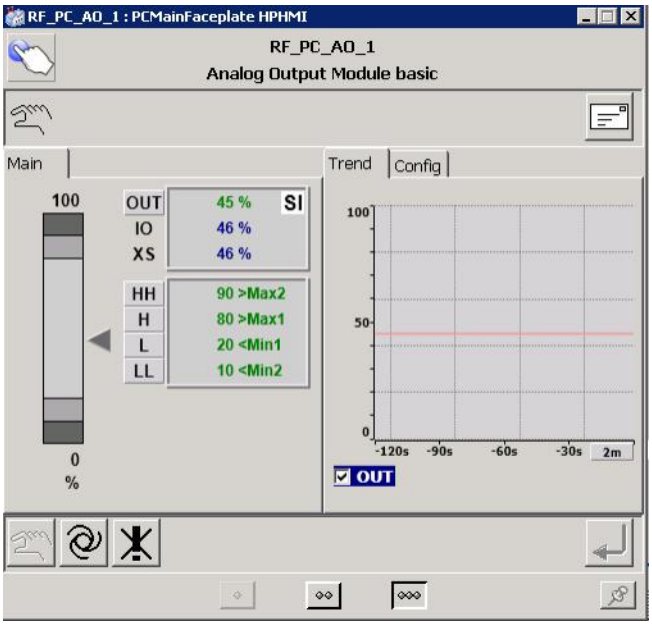


Figure: 4-2 Extended View

Basic information

Name:	PCMainFaceplateHPHMI
Description:	PC HPHMI Main Faceplate
Connect type:	Melody/AC870P
Object type:	Analog Output
Library:	PCHighPerformanceHMILib 1.0-0
Min. required 800xA version:	SV5.1RevA
Graphics Builder version:	PG2

Table: 4-1 Basic Information

Layout

Parameter	**Value**
Update rate (ms)	1000
Default view	Faceplate
Faceplate orientation	Horizontal
Reduced View	Not available

Table: 4-2 Layout information

Sizing information

Parameter in pixels	Main View	Ext. View
Width	250 px	500 px
Height	424 px	424 px
MaxNoOfIndicatorRows	1	1
MaxNoOfIndicatorsRerRow	6	12
MaxNoOfButtonRows	1	1
MaxNoOfButtonPerRow	6	12

Table: 4-3 Sizing Information

Indicator and button icons are displayed on dedicated positions. Position 1 is the upper left corner. Position 12 is the lower right corner. Position 0 is not shown.

Elements

View	Aspect	Tab	NLS-ID	User role
Main	anout_FE_HPHMI_Main	1	NLSID_PC_Main	EveryOne
Ext	anout_FE_HPHMI_Main	1	NLSID_PC_Main	EveryOne
Ext	anout_FE_HPHMI_Trend	2	NLSID_PC_Trend	EveryOne
Ext	anout_FE_HPHMI_Config	2	NLSID_PC_Config	EveryOne

Table: 4-4 Faceplate Aspect names

4.1 Faceplate Elements

4.1.1 anout_FE_HPHMI_Main

This is the main view for the Analog Output object type faceplate. Operator input is possible and based on access rights to the signals.

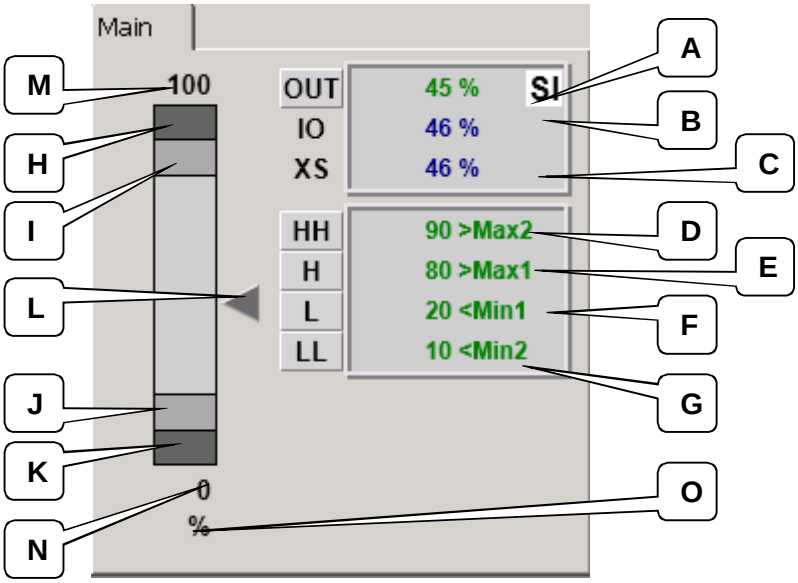


Figure: 4-3 Main Tab

ID	Comment	Property
A	Output value	Y/SIG
B	Hardware (raw) value	XRY/SIG
C	Substitute value	XSUY/SIG
D	High-high limit	AHHX/SIG
E	High limit	AHX/SIG
F	Low limit	ALX/SIG
G	Low-low limit	ALLX/SIG
H	High-high limit	AHHX/SIG
I	High limit	AHX/SIG
J	Low limit	ALX/SIG
K	Low-low limit	ALLX/SIG
L	Output value	Y/SIG
M	Max range of output value	Y/HIGH
N	Min range of output value	Y/LOW
O	Unit string of output value	Y/UNITS

Table: 4-5 Item Description

4.1.2 anout_FE_HPHMI_Trend

This is the trend view for the Analog Output object type faceplate.

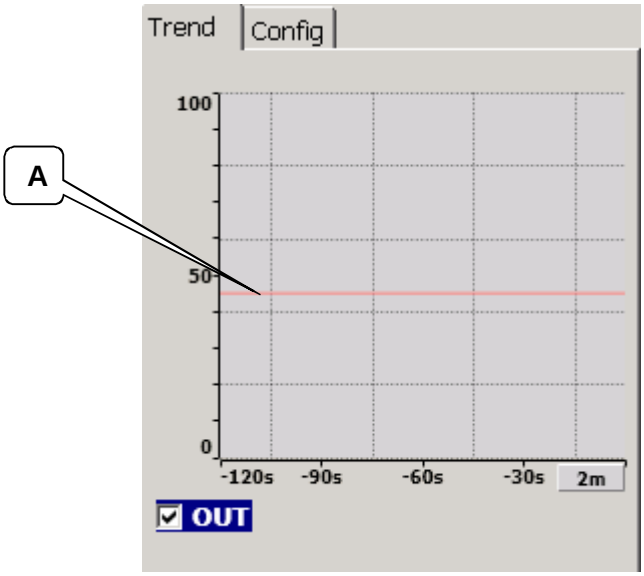


Figure: 4-4 Trend Tab

ID	Comment	Property
A	Indication of output value (“OUT”)	Y/SIG

Table: 4-6 Signal Description

4.1.3 anout_FE_HPHMI_Config

Operation Lock and Manual Inhibit Write Permissions

The Melody faceplates' configuration tab allows checking **Operation Lock** in order to inhibit operator inputs. All buttons will be grayed out. Refer to document 3BDA033456R51xx Installation and Configuration in order to change the default write permission.

Manual Inhibit can be selected to manually inhibit all alarms of this Melody tag.

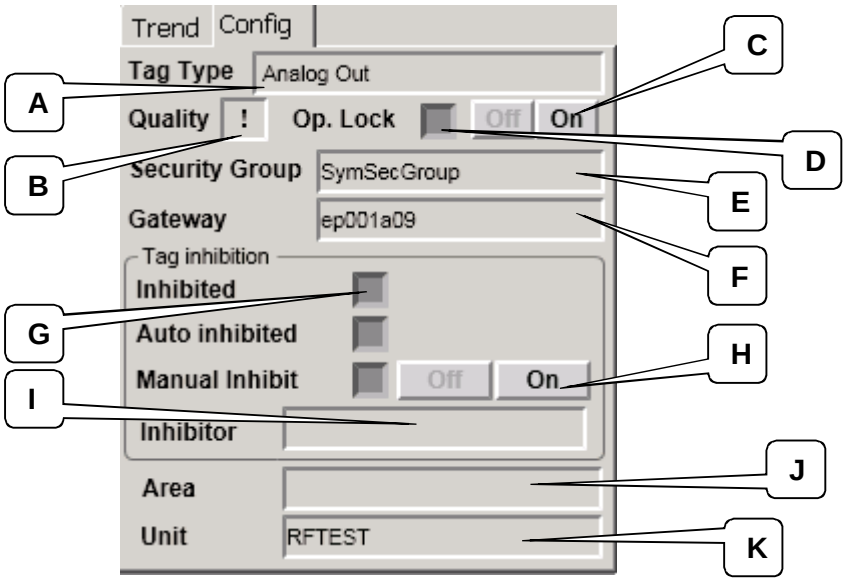


Figure: 4-5 HPHMI Faceplate Config Tab

ID	Comment	Property
A	Text describing the type of the tag	TYPE
B	Character which is providing Melody quality information	QUALITY
C	Buttons allow to switch Operating Lock on and off	On: AKO/SIG Off: AKOR/SIG
D	Binary indicator White color: Op. Lock is On Gray color: Op. Lock is Off	AKO/SIG
E	Text describing the Melody security group to which this tag belongs	SECNAME
F	Text describing the Melody gateway to which this tag belongs	GATEWAY
G	Binary indicators are showing inhibition status (white color = On)	INHB INHBAUTO INHBMAN
H	Buttons allow to manually inhibit the tag	INHBMAN

ID	Comment	Property
I	Information about inhibitor	INHBTAG
J	Text describing Melody area to which tag belongs	AREA
K	Text describing Melody unit to which tag belongs	UNIT

Table: 4-7 HPHMI Faceplate Config tab Description

4.2 Indicators

Icon	Description	Property (Value)	Position		
			Red	FP	Ext
	Manual mode	ATO/SIG	-	1	1
	Automatic mode	not ATO/SIG	-	1	1
	Forced	Y/SIG:Q=216	-	2	2
	Alarm disabled	(AHHY/ALI<>"" and AHHN/SIG and AHHY/EN) or (AHY/ALI<>"" and AHN/SIG and AHY/EN) or (ALY/ALI<>"" and ALN/SIG and ALY/EN) or (ALLY/ALI<>"" and ALLN/SIG and ALLY/EN)	-	3	3
	Operation lock	AKO/SIG	-	5	10
	Operator note available		-	0	11

Table: 4-8 Indicators

4.3 Aspect Links

Icon	Description	Aspect	Position		
			Red	FP	Ext
	Operator note	Operator note	-	6	12

Table: 4-9 Aspect Links

4.4 Faceplate Buttons

Icon	Description	Property (Value)	Position		
			Red	FP	Ext
	Set manual mode	ATO/SIG	-	1	1
	Set automatic mode	ATOR/SIG	-	2	2
	Reset the substitution value	SUO/SIG	-	3	3
	Apply the selected action	-	-	6	12

Table: 4-10 Faceplate Buttons

4.5 Graphic Elements

The following Graphic Elements have the following standard properties and enumeration.

Standard properties

Property	Data type	Default value	Description
EnableInput	Boolean	True	Enables input handling of the element, if false the element it self can't selected.
Name	String	-	Name of the element instance in a graphic display. Is set automatically by the Graphics Builder (Name of the element + index).
Rotation	Rotation	0	Rotation angle
SubscriptionRate	Integer	0	Update rate for all properties subscribed for
Transform	Transform	Empty	Enables animation like scaling, moving and rotation. It is intended only for dynamic values.
Visible	Boolean	True	Visibility of the element in the graphic display.
XPos	Float	-	X position of the upper left corner of the element

Property	Data type	Default value	Description
YPos	Float	-	Y position of the upper left corner of the element

Table: 4-11 Standard Properties for all Graphic Elements

Graphic Elements based on Melody object type Analog Output

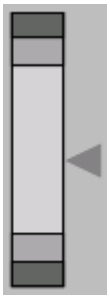
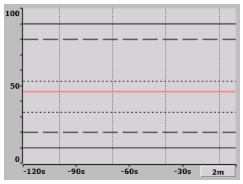
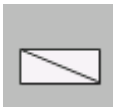
Example	Graphic Element Name	Description
	anout_HPHMI_AlarmInd	Alarm indication
	anout_HPHMI_bargraph	Bargraph indication
	anout_HPHMI_trend	Trend indication (signal Y)
	anout_HPHMI_numeric	Numeric indication (signal Y)
	anout_HPHMI_flap	Flap symbol based on analog value (signal Y)
	anout_HPHMI_valve	Valve symbol based on analog value (signal Y)
	anout_HPHMI_SuppressInd	Alarm suppression indication

Table: 4-12: Melody ANOUT – Analog Output

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