

easYgen-3000XT - Configuration example for frequency setpoint through analog input

Justin Schneider - 2026-07-27 - [easYgen-3000XT](#)

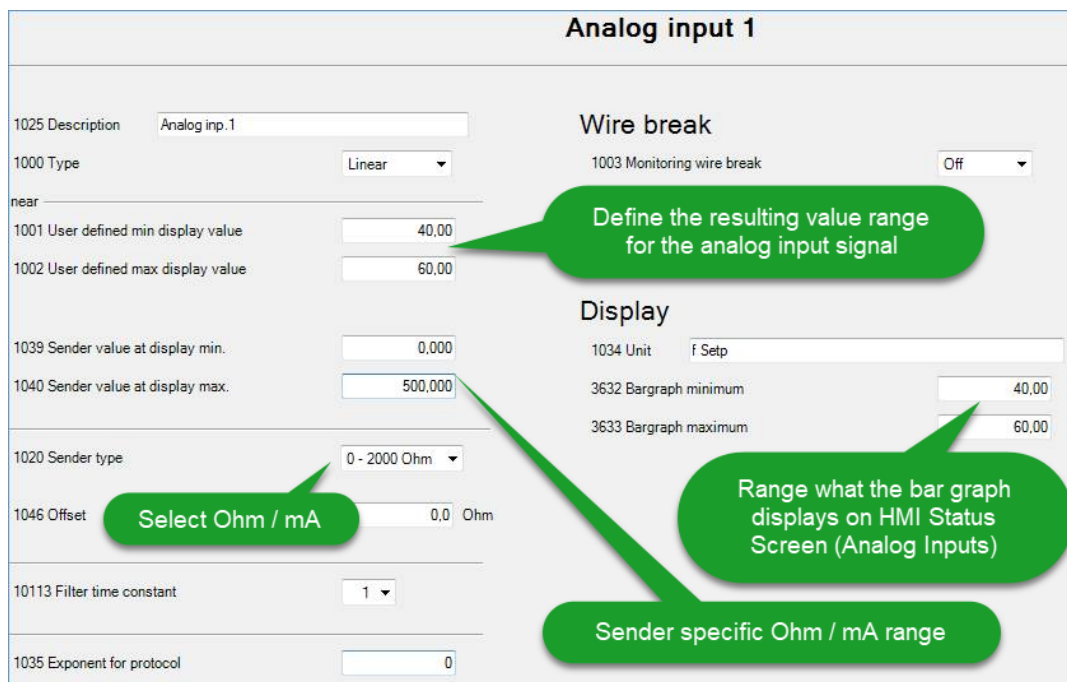
easYgen-3000 XT; Analog Input Frequency setpoint -Example

Step 1) Prepare the analog input parameters

In below example we can provide a setpoint between ...

0 Ohms = 40 Hz
250 Ohms = 50 Hz (Rated frequency)
500 Ohms = 60 Hz

ToolKit parameter screen: Analog Input 1



Analog input 1

1025 Description: Analog inp.1

1000 Type: Linear

Wire break: 1003 Monitoring wire break: Off

1001 User defined min display value: 40,00

1002 User defined max display value: 60,00

1039 Sender value at display min.: 0,000

1040 Sender value at display max.: 500,000

1020 Sender type: 0 - 2000 Ohm

1046 Offset: 0,0 Ohm

10113 Filter time constant: 1

1035 Exponent for protocol: 0

Display: 1034 Unit: f Setp

3632 Bargraph minimum: 40,00

3633 Bargraph maximum: 60,00

Define the resulting value range for the analog input signal

Select Ohm / mA

Range what the bar graph displays on HMI Status Screen (Analog Inputs)

Sender specific Ohm / mA range

Step 2) Assign the analog input as source for the "AM frequency SP2 [Hz]"

Configure controller

Configure frequency control::3

Analog manager

5518 AM Frequency SP1[Hz]

A1	05.51 Internal f setp1 [Hz]				
A2	10.01 ZERO				
C1	0				
L1	02.01 LM FALSE				
L2	02.01 LM FALSE				
Type	Pass through				

5519 AM Frequency SP2[Hz]

A1	06.01 Analog input 1				
A2	10.01 ZERO				
C1	0				
L1	02.01 LM FALSE				
L2	02.01 LM FALSE				
Type	Pass through				

Apply

Cancel

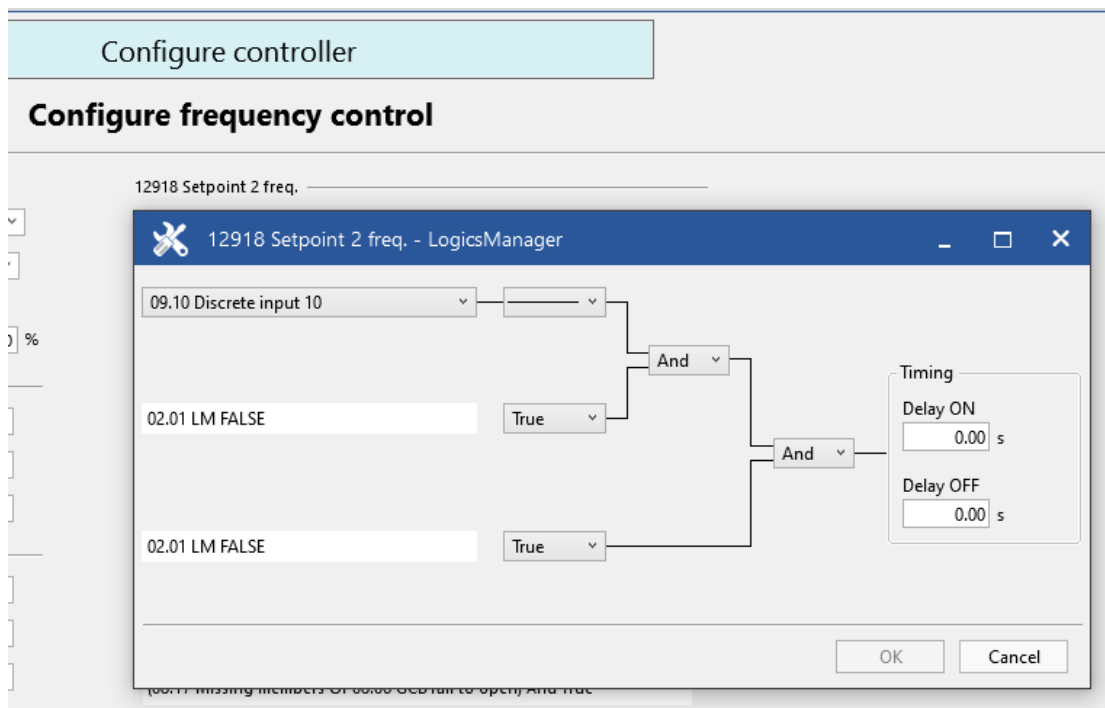
Not change necessary:
Setpoint 1 comes through
"Internal f setp." parameter

Source for the SP2
(Setpoint 2) = Analog Input 1

Step 3) Prepare the Frequency Controller\Setpoint parameters

Not mandatory, but mostly done this way: Leave the 1st f-setpoint as it is, and activate the 2nd f-setpoint whenever the analog setpoint shall count.

Assign the condition when the Setpoint 2 frequency shall get active. e.g. here by Discrete input 10 the easYgen shall change to the analog input setpoint



Whenever the analog input signal shall rule the frequency setpoint, just activate Discrete Input 10

Check resulting setpoint in STATUS MENU / Setpoints / Setpoints Generator

Setpoints

Setpoints generator

Load		Actual value:	
05.55 Internal P setp2 [kW]		5535 Speed bias	
5542 Act.power setpoint	100.0 kW	269 Act. power LSx	0.000 kW
5529 Load control manual setpoint	0.0 kW	135 Gen. total power	0.0 kW

Power factor		Actual value:	
05.10 Intern. PF setp1 [%]		5635 Voltage bias	
5641 Pwr. factor setpoint	0.950 Gen.PF	208 Mains power factor	1.000
5620 Int. power factor setpoint 1	0.950	160 Gen. power factor	1.000
5623 Power factor setpoint manual	1.000		

Voltage		Actual value:	
05.57 Internal v setp1 [V]			
5640 Voltage setpoint	400 V		0.0 V
5600 Int.voltage control setpoint 1	400 V	170 Gen. aver. ph-n volt	0.0 V
5605 Voltage control setpoint MAN	400 V		

Frequency		Actual value:	
06.01 Analog input 1			
5541 Frequency setpoint	50.50 Hz		50.00 Hz
5501 Int. freq. control setpoint 2	50.00 Hz		
5509 Frequency control setpoint MAN	50.00 Hz		

Currently valid source for the frequency setpoint

Currently resulting frequency setpoint through analog input 1

Similarly the configuration can be done as well for the Voltage-, Active Power- and Reactive Power setpoints.