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I want to use easYgen-3000XT's scaleable analog output to show powerfactor on an external instrument

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

We would like to show easYgens generator power factor $\cos\phi$ via analog output on an external instrument .

For this we use easYgen's analog output 6 (0-20mA).

The analog display has an input of 0-10V.

0-10V voltage we are getting by adding a 500 Ω resistor. ($I=U/R$)

PF 0,5 kap. ☐ 0mA ☐ 0V
PF 1 ☐ 10mA ☐ 5V
PF 0,5 ind. ☐ 20mA ☐ 10V

Please add 01.20 Gen PF % in the AnalogManager of ToolKit and set the min and max values accordingly.

In your example it would look like this...
(50% =5V= corresponds to PF=1)

Analog output 6

5271 Selected hardware type	mA	10320 Analog output 6	10.00
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Hardware range

5278 Minimum hardware level	0.00
5279 Maximum hardware level	20.00

5274 Source value at minimum level	25.00
5276 Source value at maximum level	75.00
5273 Filter time constant	3

Analog manager

5270 AM Data source AO6

A1	01.20 Gen. PF [%]	
A2	10.01 ZERO	
C1	0	
L1	02.01 LM FALSE	
L2	02.01 LM FALSE	
Type	Pass through	

Apply Cancel

See as well this article:

<https://support.easYgen.org/en/kb/articles/i-want-to-provide-a-0-4-20ma-powerfactor-setpoint-signal-to-easygen-3000xt>