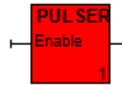


Function Block 21 Pulse Generator

Function Description

The function block will generate a low frequency pulse train with a 50:50 duty cycle. The frequency is set at design time. The frequency range is dependant on the cycle time of the task hosting the function block. Pulse generation can be enabled/disabled by a logic 1 and 0 respectively. The input can be inverted.



Popup Parameters

- Scan-down factor in the range 1...255. The popup displays the host task's cycle time and also the pulse rate resulting from your selection of scan-down factor.
- Execution Sequence Nr.

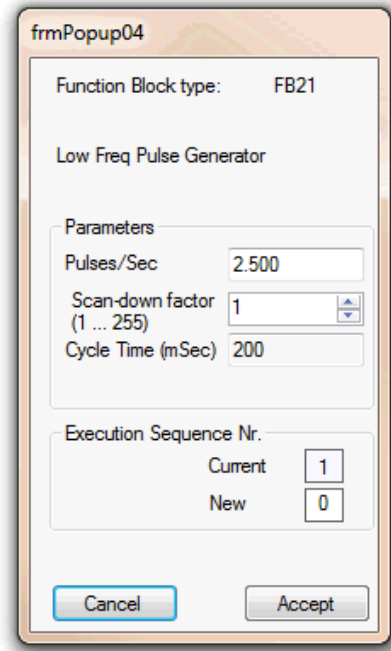
Algorithm Description

The code for this function block is inverting the output on every execution. Execution depends on the scan-down factor. The frequency can be calculated as:

$$Frequency = \frac{1000}{2 * Sf * Tc}$$

Where:

Sf = Scan-down factor
 Tc = Cycle Time (mSec)



Input/Output and Parameters

Type	Description	Data Type	Range
Input	Input signal (Enable)	Boolean	0, 1
Output	Output signal	Boolean	0, 1

Application

For generating low-frequency pulses.

Notes:

This function block can only be hosted by a Time-Task. The graphical editor will display an alarm popup when you attempt to add this function block on a Cycle-Time code page.