

# 16.2 Aurora

## Overview

The Aurora Protocol is a link layer communications protocol for use on point-to-point serial links. It is intended for use in highspeed (gigabits/second and more) connections internally in a computer or an embedded system. It uses either 8b/10b encoding or 64b/66b encoding.

Aurora parameters for Device tab:

Parameter	Type	Description	Required	Default value (when not specified)	Range	
					Min	Max
name	string	User-friendly device name	Yes			
description	string	Description of the device	No			
device_alias	string	Device alias to be used in configuration	Yes			
enable	boolean	Enabling/disabling of a device	No	1	0	1
protocol	string	Selection of protocol	Yes		Aurora	
baudrate	integer	Communication speed, bauds/s (See values 33.1.2)	No	9600	300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200	
databits	integer	Data bit count for communication	No	8	6	9
stopbits	integer	Stop bit count for communication	No	1	1	2
parity	string	Communication parity option ("none"/"even"/"odd")	No	none	None, Even, Odd	
flowcontrol	string	Communication device flow control option.	No	none		
scan_rate_ms	integer	If provided and positive all reads and writes will be executed within the timeframe in milliseconds.	No	10000		
poll_delay_ms	integer	Minimum time delay in milliseconds to wait before sending any data on port.	No	200		
timeout_ms	integer	Timeout in milliseconds	No	2500		
id	integer	Inverter ID	No	0		
device	string	Communication port	Yes		PORT1	PORT2

Aurora parameters for the Signals tab:

Parameter	Type	Description	Required	Default value (when not specified)	Range	

				specified	Min	Max
signal_name	string	User-friendly device name	Yes			
device_alias	string	Device alias from a Devices tab	Yes			
enable	boolean	Enabling/disabling of an individual signal	No	1	0	1
log	integer	Enable logging in the event log (Default: 0)	No	0	0	
signal_alias	string	Unique alphanumeric name of the signal to be used	Yes			
job_todo	boolean	Define tag-function	Yes			
tag_job_todo	string	Define tag action that depends on tag function	Yes			
number_type	string	Type of a number (FLOAT, DOUBLE, DIGITAL, etc.)	Yes			
pulse_short_time_ms	integer	The time interval for short output pulse to stay active	No	0		
pulse_long_time_ms	integer	The time interval for a long output pulse to stay active	No	0		