

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 | | |