Quanta 5 product family

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This page is intended to show the Quanta 5 web interface options that provide a wide range of monitoring capabilities. This article is only intended to briefly show the main parameters for device monitoring and troubleshooting. For more information about the Web interface please proceed to Quanta 5 / Quanta 6.

Monitoring options

Dashboard

This section is intended to provide the main information about the wireless unit operation.

The Dashboard displays a read-only summary of the current link status information, local and remote device signal strength, capacity for downlink and uplink, current values of the basic configuration settings and the Ethernet network status.
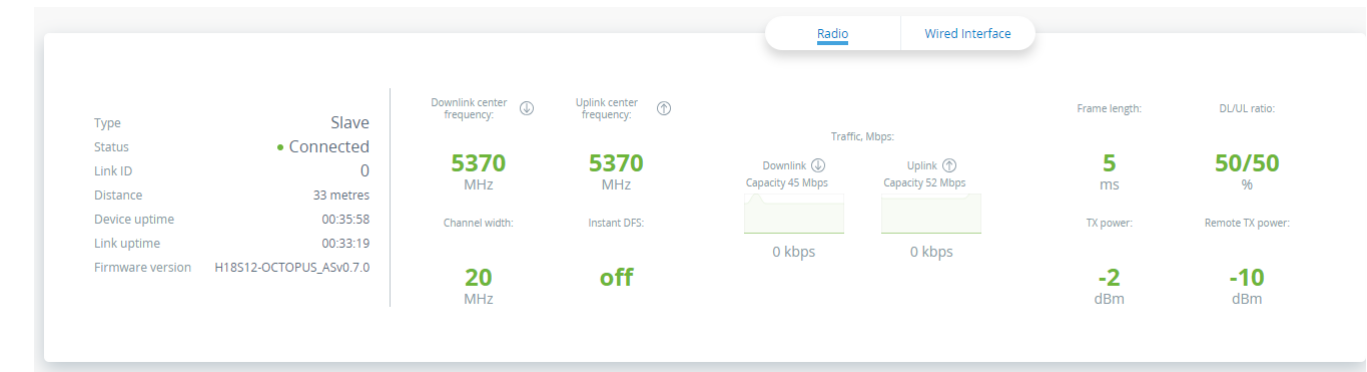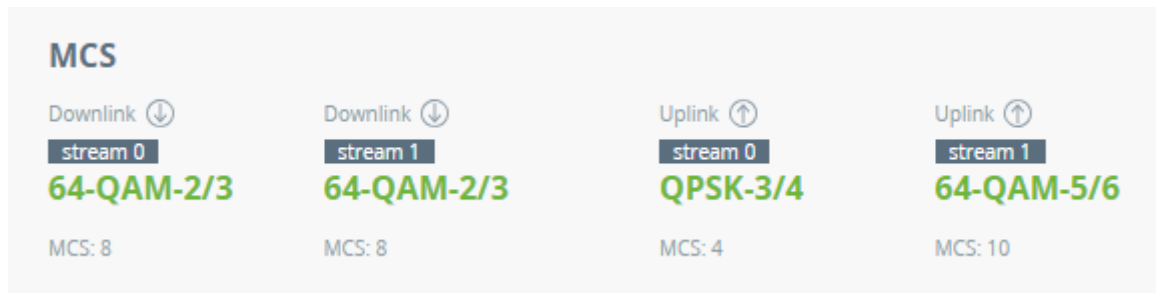

The wired interface state monitoring is also available in this section. The Quanta 5 device has one wired gigabit Ethernet interface, its status and current load can be viewed in real time.
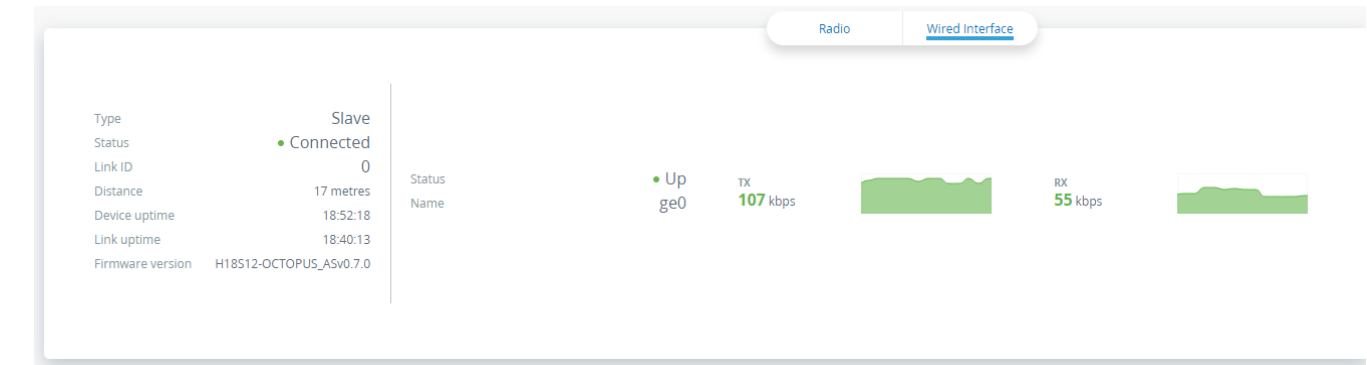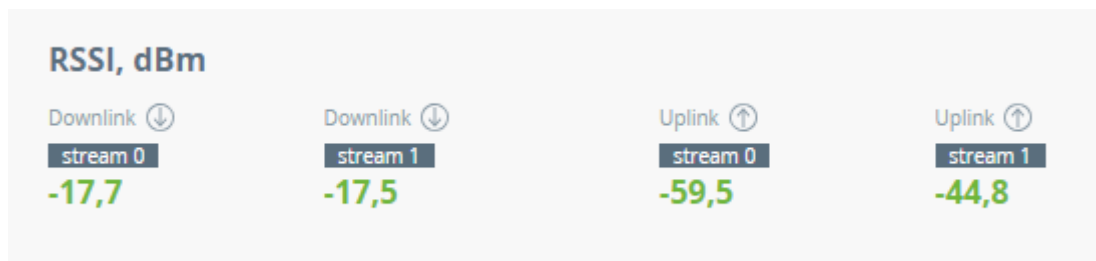

Modulation and coding scheme

For the Quanta 5 device, the modulation and coding schemes are selected independently for each channel (uplink and downlink) for both polarizations. Quanta 5 supports 14 modulation-coding schemes from QPSK 1/4 to QAM256 7/8. The current modulation for each channel is displayed in the MCS subsection.

MCS

Downlink ↓	Downlink ↓	Uplink ↑	Uplink ↑
stream 0	stream 1	stream 0	stream 1
64-QAM-2/3	**64-QAM-2/3**	**QPSK-3/4**	**64-QAM-5/6**
MCS: 8	MCS: 8	MCS: 4	MCS: 10

Received signal strength indicator

The RSSI indicator displays the received signal level for each channel (uplink and downlink) and both polarizations. Available values:
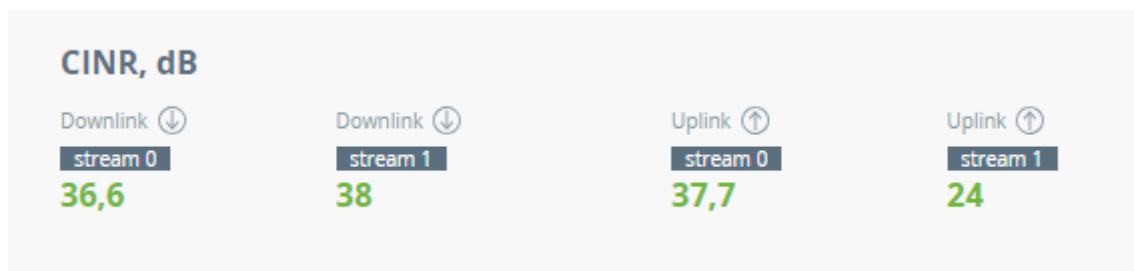
- **-90...-80 dBm** - close to the receiver sensitivity level, only the lowest modulations are available.
- **-80...-60 dBm** - average input range.
- **-60...-40 dBm** - the recommended range for achieving the best performance.
- **>-40 dBm** - the input signal level is too high.

RSSI, dBm

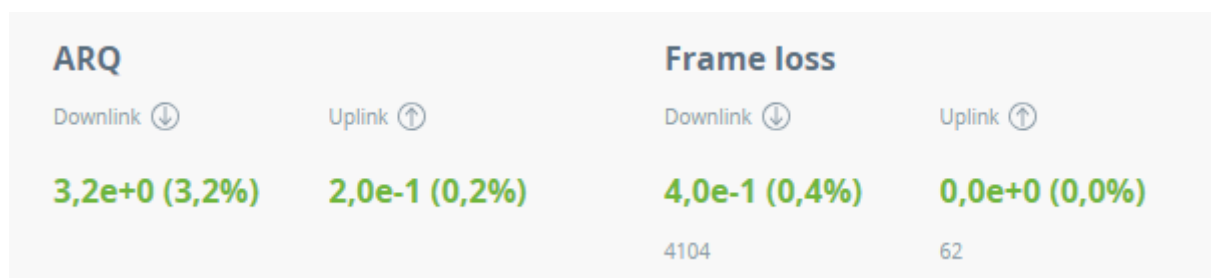| Downlink ↓	Downlink ↓	Uplink ↑	Uplink ↑
stream 0	stream 1	stream 0	stream 1
-17,7	**-17,5**	**-59,5**	**-44,8**

Carrier to Interference + Noise Ratio

The CINR indicator shows the signal quality, more precisely, how strong is the carrier signal compared to the noise plus interference level. Available values:

- **5...12 dB** - very low signal quality, only the lowest modulations are available.
- **13...19 dB** - low signal quality, average modulations are available.
- **20...27 dB** - average signal quality.
- **>=28 dB** - very good signal quality, suitable for the highest modulations.

CINR, dB

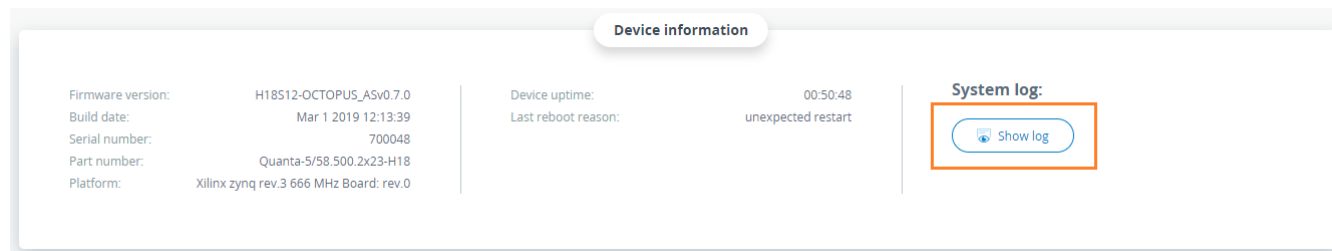| Downlink ↓	Downlink ↓	Uplink ↑	Uplink ↑
stream 0	stream 1	stream 0	stream 1
36,6	**38**	**37,7**	**24**

Retries and Frame loss

Retried and lost packets need also to be tracked. Retries should tend to zero and a link with a retries value more than 5% should not be allowed to operate.

ARQ

Downlink ↓	Uplink ↑
3,2e+0 (3,2%)	**2,0e-1 (0,2%)**

Frame loss

Downlink ↓	Uplink ↑
4,0e-1 (0,4%)	**0,0e+0 (0,0%)**
4104	62

System log

An important tool in troubleshooting, which allows to track changes that preceded the link degradation. To view the system log, go to "Service" → "Maintenance" → "Device information" and click the "Show log" button.

Device information

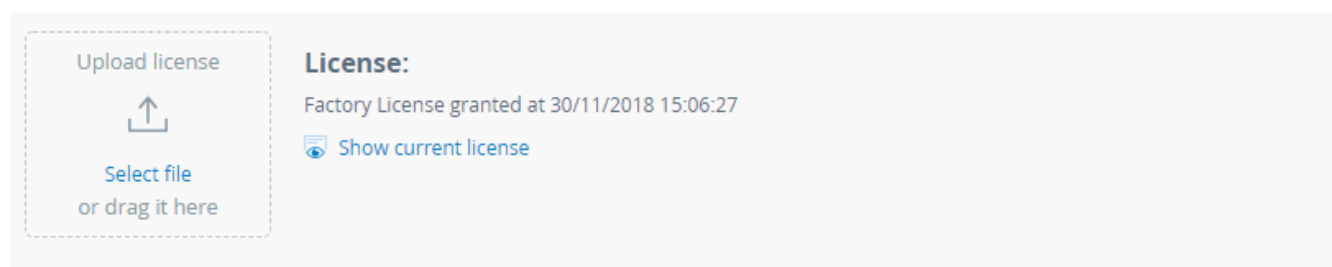|			
Firmware version:	H18S12-OCTOPUS_ASv0.7.0	Device uptime:	00:50:48
Build date:	Mar 1 2019 12:13:39	Last reboot reason:	unexpected restart
Serial number:	700048		
Part number:	Quanta-5/58.500.2x23-H18		
Platform:	Xilinx zynq rev.3 666 MHz Board: rev.0		

System log:

[🔍 Show log]

Management options

Quanta 5 management options are available in the "Maintenance" section, which allows to perform firmware updates, operations with licenses and with the configuration, as well as device reboot and reset to factory settings.

License

The license contains information about the allowed frequencies, the channel width and the power limit. This section allows to view the current license and upload a new one. To upload a license on the device, click on the "Upload license" button and drag and drop a file from your file manager into the dotted area.

Upload license
↥
Select file
or drag it here

License:
Factory License granted at 30/11/2018 15:06:27
🔍 Show current license

Firmware

There are two options to upgrade the firmware on the device:

- Manually - the new firmware should be downloaded from the official Infinet FTP server: https://ftp.infinet.ru/pub/Firmware/. Click on the "Upload firmware" button and choose a firmware file. Alternatively, you can drag and drop a file from your file manager into the dotted area.
- Automatically (coming soon) - the latest firmware version can be uploaded automatically. Click on "Update firmware to the latest version", after that your web browser will try to download the latest firmware version and upload it to the unit. The firmware will be effective after unit reboot.

Upload firmware
↥
Select file
or drag it here

Firmware:
H18S12-OCTOPUS_ASv0.7.0
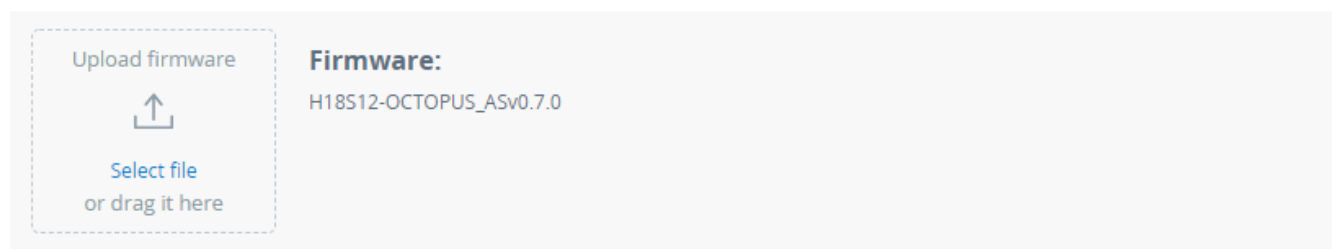
Configuration

The Quanta 5 device allows to upload, download and view the current configuration in text form. To view the configuration, click on the "Show current configuration" button and the file will open in a new window. To download the configuration, click on the "Download current configuration" button and the configuration can be loaded by clicking on the "Upload configuration" button, or you can drag and drop a file from your file manager into the dotted area.

Title

Diagnostic card

In situations when the help of the InfiNet Wireless technical support team is required, the diagnostic card is a necessary tool which helps to detect and solve an issue faster and more effective. Click on the "Download" button to create the diagnostic card.