QDS 4-Channel Multi-Range Precision Digital Quench Detection System Instruction Manual

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Contents

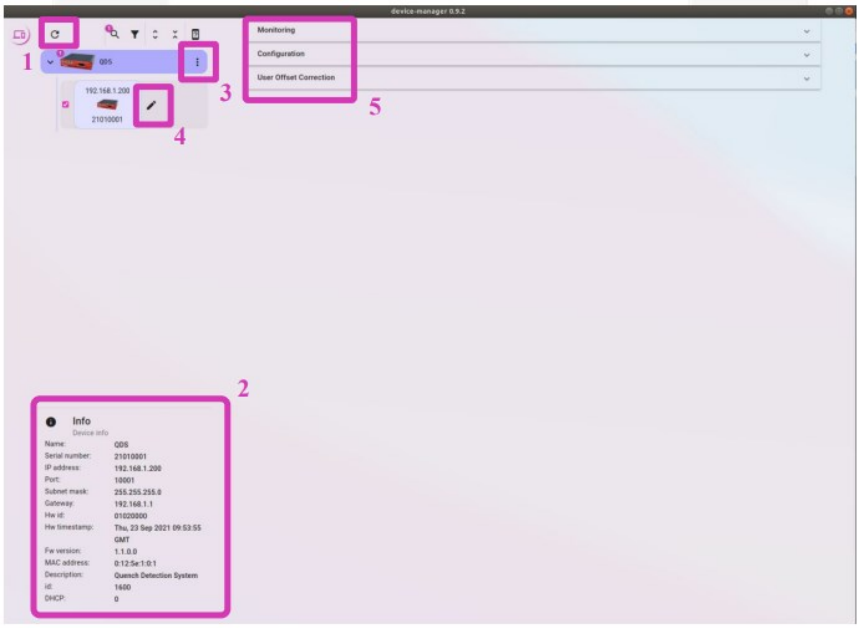
Introduction

This chapter describes the main features of the Device Manager user interface for the QDS – Quench Detection System.

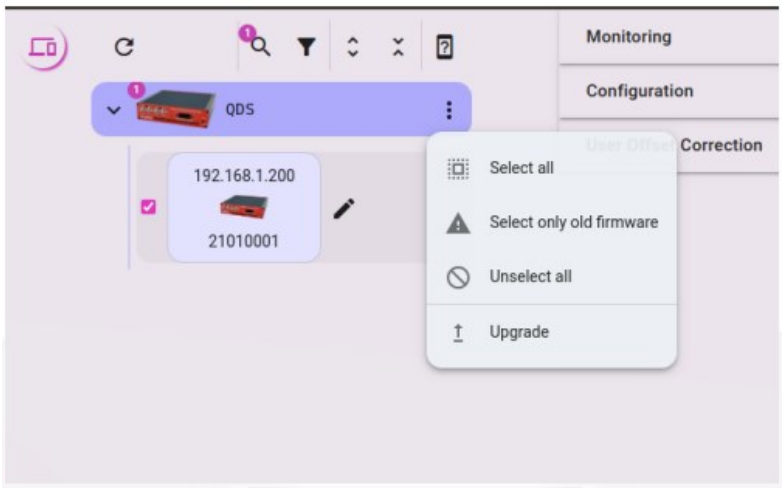
The main window

Figure 1 shows the main window of the Device Manager interface with the following features:

1. Refresh button – discover CAEN ELS devices on the network (broadcast);
2. Device Info box – summary of the main information about a CAEN ELS device;
3. Options button – Additional option (i.e. upgrade menu);
4. Edit button – change network configuration (IP, netmask and gateway);
5. Additional Features – monitoring and configuration tabs.



Options menu
From the “options menu” it’s possible to upgrade the device firmware. Follow the upgrade firmware guideline reported in the “User’s Manual” of the specific device.



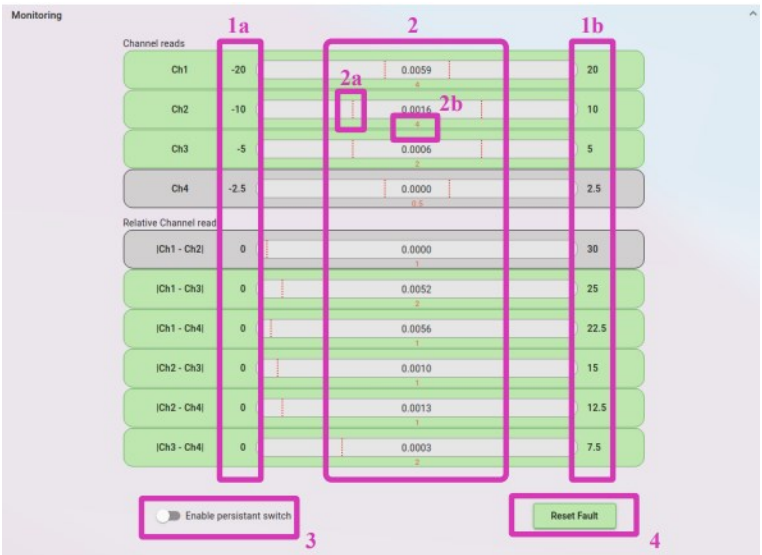
Edit menu
Use the “edit menu” to change the main network parameters, such as IP, netmask and gateway addresses.

Additional Features

Monitoring menu

The “Monitoring menu” is the main window of the QDS device. Each channel is represented by a horizontal bar which can be highlighted in green (channel enabled), grey (channel disabled) or red (channel in fault condition). The window has the following main characteristics:

1. These numbers indicate +Full Scale (1a) and -Full Scale (1b);
2. These are the real/time voltage readings in [V]. The dashed vertical bars (2a) indicate the thresholds positions with respect to the total length of the horizontal bar. The actual values of the thresholds are reported in red (2b) at the center of horizontal bar below the voltage reading;
3. This is one of the two clickable buttons of the monitoring window and can be used to Enable/Disable the persistent switch heater, OFF (0 [V]) or ON (12 [V] or 24 [V]);
4. his button has a double function: it indicates status of the QDS and it can be used to reset the status of the QDS. In normal operation (No fault condition) the icon is green (as in Figure 4), while in fault condition the icon becomes red (as reported in Figure 5). By clicking the “reset fault” button the fault conditions are cleared.



Configuration menu

hows the “Configuration menu” which can be used to configure all the main parameters of the QDS device. When changing a parameter, the new value is applied by pressing “enter” (on the keyboard) or by mouse-clicking on a random area of the configuration window. On the configuration window the following configurations are available:

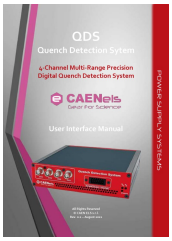
1. Enable the desired channels;
2. Select the range of the corresponding channel;
3. Indicates the full scale of the corresponding channel depending on the actual range;
4. Set the thresholds in [V];
5. Set the time windows in [ms].
6. Store Configuration button: saves enabled channels, thresholds and time windows in the non-volatile memory. The saved configuration will be loaded by default at the next start-up. For safety reasons the range values are not saved in the volatile memory and the ranges are always set to range 0 at start-up;
7. Restore Default button: restores default ranges, thresholds and time windows (see the “Quench Detection System Commands Reference Manual” for more information). This parameters are applied in real-time but not saved in the non-volatile memory. To save them use the store configuration button;

User Offset Correction menu

The “User Offset Correction” menu allows the user to set an additional offset on specific channels and specific

ranges (box 1 in Figure 7). Use the “Enable user correction” button (box 2 in Figure 7) to enable immediately the user correction offsets. Use the “Save user correction” button (box 3 in Figure 7) to save the user correction offsets in the non-volatile memory ready to be loaded at the next start-up.

Documents / Resources

	QDS 4-Channel Multi-Range Precision Digital Quench Detection System [pdf] Instruction Manual 4-Channel Multi-Range Precision Digital Quench Detection System, 4-Channel Digital Quench Detection System, Multi-Range Precision Digital Quench Detection System, Precision Digital Quench Detection System, Precision Quench Detection System, Digital Quench Detection System, Quench Detection System, Quench Detection

References

- CAENels - Manufacture of consumer electronics