TFCompanion Release
Build 04.28.23. Version 5.1

This release adds automatic reconnection of TCP connection to spectrometer, in cases of timeout or reset of the spectrometer electronics. This release is synchronized with firmware update of the spectrometer. New firmware includes the watchdog that resets the spectrometer if it is stalled for 20 sec. If spectrometer firmware is not updated – automatic reconnect will still work in cases of timeout.
Automatic reconnect is implemented in spectrometer driver/adapter. It is active in the Signal Monitor and TFC server (used for integration with external software, includes in cases of Modbus communication).

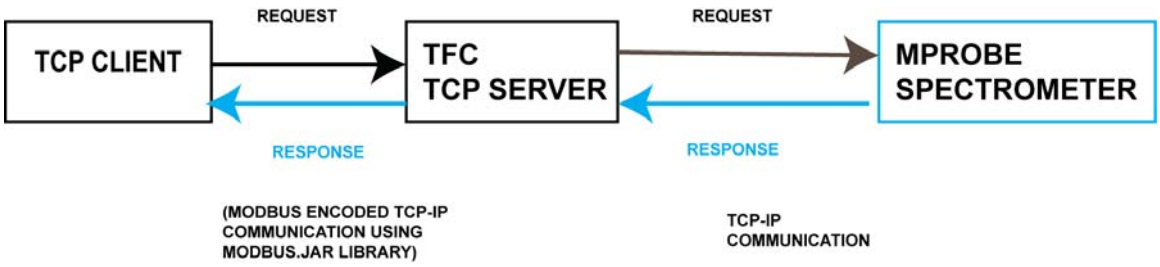


Fig. 1. Diagram of TCP client communication.

If response from the spectrometer is not received by the spectrometer adapter/driver - it makes 3 repeated attempts to reconnects with 5 sec delay between the attempts.
During this time, TFC TCP server is waiting for the response and, correspondingly, TCP client have to wait for response as well. If reconnection attempt is successful, the response to the last request will be received and measurement can continue.
In case of firmware reset, TCP client should be able to wait 35sec to 40 sec before receiving response. If connection between TCP client and TFC TCP server is interrupted/timeout, TCP client should reconnect to the server.

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