Firmware history

## Release Notes PQ5000-MOBILE



## **GMC INSTRUMENTS**

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| Version                       | Change log  |
|-------------------------------|---|
| V3.18 – 11142<br>(2024/12/20) | Firmware of the base unit changed, but no impact on the available functionality of the PQ5000MOB  |
| V3.16 – 10900<br>(2024/07/23) | <ul> <li>New features</li> <li>PQ data export in PQDIF format</li> <li>Security upgrades</li> <li>Nginx from 1.21.1 to 1.25.3</li> <li>OpenSSH from 8.7p1 to 8.9p1</li> <li>Host Key Algorithms SSH-RSA and SSH-DSS no longer supported by default, but may be activated if required for SFTP communication</li> <li>Fixes</li> <li>Large number of frequency events if used outside the rated frequency range</li> <li>PQ overview: No graphical display for current harmonics and interharmonics</li> <li>SFTP configuration menu was present even for device versions without data logger</li> <li>Time scaling of waveform display could be wrong</li> <li>In PQ statistic frequency was shown with one decimal place</li> <li>CSV data export for 7 days: File was stored in the folder of the first day of the interval rather than the day of the end of the interval, in addition the time range of the file was not visible within the file name and could overwrite daily files with the same content.</li> </ul> |
| V3.15 - 10685<br>(2024/06/04) | Fixes  • Button for start/stop of recording and corresponding LED did not work  |
| V3.12 - 10528<br>(2024/03/07) | New features  Support for new option "Assessment of harmonic contribution" for monitoring the grid feedback of customer installations according DACHCZ regulations, IEEE519, IEEE1547, GB/T, DTR or MPQS  Status of time synchronization directly visible via status bar on the device website  PQ and energy management data can be downloaded in specific CSV file format to be used with PQIS® software  In the PQ statistic section harmonics and interharmonics of voltages and current can be displayed as daily statistic or as time series  |
| V3.08 – 9533<br>(2023/04/20)  | Fixes  ■ IEEE519: Missing data reported although all values were present  ■ IEEE519: Wrong assessment of 3 sec. voltage harmonics if rated voltage ≥1kV  ■ IEC61000-2-4 class 3: Wrong limit value for 15 <sup>th</sup> voltage harmonic  |
| V3.06 – 9366<br>(2023/02/23)  | Fixes  Setting of meter contents did not work properly Reset of meter contents in case of overflow  |
| V3.05 – 9108<br>(2022/11/23)  | New features  Support for compliance assessment according IEEE 519 - 2022  Fixes  Uploading configuration files into <empty memory="" slot=""></empty>  |

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| V3.04 – 8854<br>(2022/09/02) | Fixes  • Missing time scaling in report graphics if measurement period without day change  |
| V3.04 – 8813<br>(2022/08/19) | New features  Zoom functionality in PQ daily statistics Improved graphical representation of PQ statistic overview including mouse-over functionality Support for next generation USB WLAN dongle  |
|                              | Security upgrades  Nginx from 1.16.0 to 1.21.1 OpenSSH from 8.2p1 to 8.7p1   |
|                              | <ul> <li>Fixes</li> <li>Storage of changed settings in a different configuration than the active one does not work</li> <li>Improved error reporting for SFTP communication test function</li> <li>SFTP server export not possible if file names containing UTF8 characters</li> <li>Wrong maximum values for THD_U</li> <li>Setting parameter for homopolar voltage measurement not available</li> <li>Wrong time stamps in CSV export of waveform display data</li> <li>Delayed entries to alarm and event list</li> <li>New Audit log entry when pending SFTP file exports complete</li> <li>Reset of min/max values via Modbus coils did not work</li> <li>Activation of whitelist blocks Modbus/TCP communication</li> <li>Missing data in meter logger if 1 min. interval is used</li> </ul> |
| V2.05 - 8160<br>(2022/03/02) | Fixes     In rare cases an Ethernet interface connection could not be established after a factory reset or device restart     Password length for SFTP server access was limited to 12 characters     Configuration parameter for maximum load current (for scaling of TDD values) not available via menu     Homopolar voltage (zero displacement voltage) may be displayed in event recordings for 3-wire systems.   |

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| V2.04 – 7857<br>(2021/12/07) | This is a crucial update for the long-term stability improvement of the device. Once installed, it is not possible to return to an older version of the firmware.  |
|                              | New features  Support for Unicode characters (UTF8) in all user-defined event and description texts. These texts are used in event lists, for PQ reporting and as part of the CSV and PQDIF file names.  |
|                              | <ul> <li>Fixes</li> <li>Missing scaling for current harmonics / interharmonics in PQ daily statistic</li> <li>Wrong storage path for local storage of CSV data files. Files stored in the wrong directory will be transferred to the correct folder.</li> <li>Crash of WEB-GUI when displaying mains signaling events</li> <li>U<sub>NE</sub> could not be displayed in event samples visualization</li> <li>Fault current module configuration not protected via RBAC</li> <li>PQ event list display could be different for local and WEB-GUI</li> <li>Event state in status bar was not reset if event duration was longer than 3 minutes</li> </ul> |
| V2.03 – 7001<br>(2021/06/11) | New features  EasyUpdater: Software for firmware updates  Selectable periodic PQDIF format: Data in three files or one file, generated daily or weekly, either for one or 7 days  PQDIF with additional frequency trend data (10-min average)  Selectable decimal separator for CSV export for easy import into Excel  Additional daily PQ assessment for 3-s quantities according IEEE519  Fixes  Factory reset  Double ITIC graphic in PQEasy report  Event-driven PQDIF generation did not work  Wrong scaling of instantaneous values of user defined mean-values when displayed on local GUI or webpage   |
| V2.02 – 6518<br>(2021/03/08) | Fixes  Factory reset not complete  Mains signaling events not visible in appropriate event list  Date selection not always displayed in mean-values logger display   |
| V2.01 – 6308<br>(2021/02/01) | New features  Support for IPv6 communication  Fixes  Time difference of events in PQ-Easy report if device is located in a different time zone   |

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| V2.00 - 6162<br>(2020/12/04) | New features  PQ Easy-Report support for IEE519 and GB/T  Filters for time range and event type in PQ event list  Device handbook available via webpage  Language support Czech and Spanish  Fixes  Character set problems when creating PQ-Easy-Reports if Chinese, Ukrainian or Russian language is selected   |
| V1.06 - 5989<br>(2020/10/29) | Fixes  Logical error in EN50160 report summary Possible crash during report generation   |
| V1.06 – 5800<br>(2020/08/19) | Fixes ■ Non reliable UPS backup mechanism  |
| V1.05 – 5711<br>(2020/08/06) | New features  Security: Role-Based Access Control (RBAC) as replacement for the Simple Password Protection. Individual access rights may be assigned to up to 8 users with own login credentials. No plain-text transmission of login information, increase of the latency period in case of repeated login attempts, software access only via access keys etc.  Security: Audit log as replacement for the operator list. Logging of all activities relevant to safety.  Security: Support for Syslog protocol for transferring all audit log entries to a central grid monitoring server  Enhanced monitoring of PQ events: Current swell, voltage imbalance (homopolar voltage) and frequency event  Enhanced PQ event recording capability for waveforms: Up to 1 second before and 5 seconds after the event  Additional recordings of 10-min trends of frequency and mains signaling voltage, previously available as daily histogram only  New features when analyzing events via webpage: Zoom and value display  New features when analyzing daily PQ trends: Values display without limits and / or min/max fluctuation  PQ Easy-Report: Assessment for each multiple of 10 minutes.  PQ-Easy-Report: Lower limit of no-damage region in ITIC curve configurable  List of all surveys recorded with a specific configuration available via Config manager  Data export scheduler for pushing CSV or PQDIF files periodically or event-driven to an SFTP server. The same files may be stored locally in the device as well.  Language support Turkish  Fixes  Possible errors due to interrupted survey recordings  Report creation using user-defined limits did not work |
| V1.04 - 5343<br>(2020/04/16) | New features  Support for new hardware feature: UPS (uninterruptible power supply)   |
| V1.03 – 5261<br>(2020/03/19) | New features  Language support Ukrainian Language support Russian  |

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| V1.02 – 4973<br>(2019/11/18) | Fixes     Rare occurrences of wrong out of range 10-sec frequency measurements affecting the appropriate PQ statistic     After device restart energy meter contents may be smaller than the values before the restart |
| V1.01 – 4884<br>(2019/09/06) | Fixes  Non-working PQ event data export  Source mismatch for operating hour counters   |
| V1.00 – 4742<br>(2019/05/29) | Official product release   |