

MicroPMU

Firmware 3.11.0 Release Notes



Note: If your microPMU has a firmware version lower than 3.5.0, please contact support@powerside.com before updating firmware

Firmware 3.11.0 Bug Fixes

- Fixed an issue where microPMUs configured in Low Latency mode could hang at 90% during Setup.ini USB uploads and fail to recognize USB or SD cards.

Firmware 3.10.8 Bug Fixes

- Resolved issue where microPMU Configurator incorrectly writes PMU_Measurement_Mode tag.
- Corrected module type indication on web page for the GNSS module (previously indicated as GPS)

Firmware 3.10.6 Bug Fixes

- Fixed minor issue with power factor in high accuracy mode

Firmware 3.10.5 Bug Fixes

- Fixed minor issue with power factor in high accuracy mode on the web page / display.
- Fixed issue with phase angle in low latency mode.

Firmware 3.10.4 Bug Fixes

- Fixed issue with phasor rotation in low latency mode.

Firmware 3.9.4 New Features and Improvements

- Added microPMU kernel security updates
- Added C37.118.1 streaming UDP operation behind domestic network routers
- Improved C37.118.1 streaming compatibility:
 - > fractional second in frame
 - > station name padding in frame
- Improved C37.118.1 streaming compatibility: ROCOF field corrected in frame

Firmware 3.6.0 New Features

Added a new operation mode: the low latency mode:

- > Suitable for more real time, controller type of functions.
- > You define which filter the microPMU uses: P-Filter or M-Filter (see C37.118.1-2011).
- > Streaming at the maximum rate (120 frames/s at 60Hz, 100 frames/s at 50Hz).
- > Streaming output latency: typical 50ms.
 - Note: there is no recording to the microPMU memory in this mode.
- > The C37.118.1-2011 stream contains up to 8 current channels, 4 analog channels (AC or DC).

Firmware 3.5 New Features

Supports the ultra-precise synchrophasor measurements for the microPMU:

- Ultra-precise phasor measurements on 3 voltage channels and 3 current channels. TVE 0.01%.
- Simultaneous recording and streaming of micro-synchrophasors .
- Fast recording / streaming rate: 100/sec at 50Hz and 120/sec at 60Hz.
- Measured parameters: voltage and current phasors, frequency, apparent /active /reactive powers, power factor.
- Streaming to Ethernet port at 10~120 frames/s at 60Hz, 10~100 frames/s at 50Hz compliant with C37.118.1-2011. TCP/IP and UDP/IP is supported.
- Recordings downloaded via FTP.
- Configuration / firmware update via FTP or Web pages (HTTP) .
- 30 days* of micro-synchrophasor measurement stored in internal memory.
(*) 30 days with microPMU with 32Gb internal memory, 14 days for microPMU with 16Gb internal memory

Firmware 3.6.4 Bug fixes

Fixed the behavior when the microPMU operation mode tag is missing. It then defaults to “Precision” mode (see 3.6.0 feature list above).

Firmware 3.6.2 Bug fixes

Fixed IEEE C37.118.1 “Send Configuration” frame issue when using microPMU in “low latency” mode.