Thorlabs PM100D Handheld Power and Energy Meter - Firmware Changelog

This firmware is a device internal program for PM100D Optical Power and Energy Meters. For installation instructions consult the users manual.

Changelog
Dec-29-2008   Release V1.0
Jan-28-2009   V1.1
- CHANGE: Decreased contrast setting minimum DAC of the display.
- CHANGE: Improved Plot Graph with variable y-Axis min value.
Apr-28-2009   V1.2
- NEW: SCPI command to set/query default adapter type.
- BUGFIX: Wrong responsivity settings loaded for thermopile adapters or pyro adapters after sensor connect or power up.
- BUGFIX: Min/Max monitor added wrong measurement values if input stage was overflown or underrun.
May-20-2009 V1.3
- NEW: Auto thermopile acceleration mode.
- BUGFIX: USB hang-up possible with S130 sensors.
- BUGFIX: HOT! status display now works properly.
Nov-20-2009   V2.0
ATTENTION! This firmware version requires instrument driver version 2.0.0 or later installed for remote operation. Older instrument driver version will not recognize the instrument with DFU interface (Firmware Update) disabled.
- NEW: Multi language user interface providing English and Chinese user interface.
- BUGFIX: Locally setting wavelength was possible in remote mode.
- CHANGE: USB descriptors with different USB-Product IDs when enabling/disabling the DFU interface (Firmware Update). This solves problems of Windows to install the correct USB drivers. The USB PIDs are:
- PM100D w. DFU: PID = 0x8070
- PM100D w/o DFU: PID = 0x8078
Nov-24-2009   V2.1
- BUGFIX: Size of focused representation of the "Enter Range Menu" function was calculated too big.
- BUGFIX: Battery Saving Timeout did not power down all voltage generation circuitry. This reduced battery capacity during standby.
- BUGFIX: Auto ranging now works correct for negative measurement values.
- BUGFIX: Firmware hang up after ZERO process solved.
Jan-27-2010   V2.2
- BUGFIX: Random USB timeouts and hang ups solved.
Jul-16-2010   V2.3
- BUGFIX: Chinese translation of ZERO button corrected.
Oct-18-2012   V2.3.2
- BUGFIX: USB measurement timeouts on optical input overload solved.
Mar-21-2014   V2.4
ATTENTION! This firmware version creates best thermopile measurement results with PM100D serial number P0006159 and higher (newer hardware). The firmware also works on older hardware but might show higher noise levels during thermopile acceleration compared to the latest hardware. On customer request older hardware can be updated to V2.4 requirements at the next calibration service.
- CHANGE: Improved thermopile acceleration.
- CHANGE: Thermopile acceleration disabled during zero measurement.
Jan-30-2017   V2.5
- BUGFIX: SCPI command *RST did not work.
- BUGFIX: With sensors specifying a maximum beam aperture of 10 mm the beam diameter control in the Measurement Settings front GUI menu showed HI.
- CHANGE: When changing the sensor now as much setup data is copied/coerced for use with the new sensor instead of resetting all setup to default.
May-04-2018 V2.6
- BUGFIX: Logging to SD card randomly aborted. Fixed SD-card interface timing.
- BUGFIX: Some SDHC cards didn't reliably initialize. Disabled SD-card bus clock power saving mode during SD-card initialization.

- BUGFIX: Internal memory timing was out of specifications.
- BUGFIX: SCPI command MEAS:FREQ? timed out with slow pyro sensor pulses.

Mar-07-2020 V2.7
- BUGFIX: Console crashed after activating delta mode while the energy sensor not yet had measured a pulse.

Jun-07-2020 V2.8
- CHANGE: Support for old and new TFT display controller RA8835
ATTENTION! The new TFT display controller is used in PM100D with serial number P0029334 and higher. Do not downgrade the firmware of these devices to versions older than 2.8. This results in no display output!

Dec-21-2020 V2.8.1
- BUGFIX: Removed display cursor artefacts of FW V2.8 caused by old display controller