Urgent Safety Notice

PTW UNIDOS webline
Firmware

PTW–Freiburg
Physikalisch-Technische Werkstätten
Dr. Pychlau GmbH

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Attention: At a dose (or charge) measurement using UNIDOS webline with firmware version 2.05, individual measurement intervals can be lost. This can result in a too-low dose (or charge) display in a special application.

This error can occur when the internal amplifier stage is switched automatically. If the measurement signal changes distinct change several times during measurement, so that the internal amplifier stages are switched, the error can be added up and leads to a significant share in the measurement signal.

Affected devices:

PTW UNIDOS webline types T10021, T10022 and T10023 with the serial numbers:

T10021: 000005, 000019, 000037, 000041, 000047, 000049, 000058, 000066, 000074, 000076, 000079, 000099, 000107, 000125, 000141, 000144, 000158, 000161, 000168, 000175, 000186, 000212, 000221, 000224, 000229, 000231, 000254, 000262, 000274, 000294, 000301, 000302, 000327, 000351, 000352, 000382, 000401, 000413, 000424, 000437, 000445, 000452, 000470, 000477, 000486, 000504, 000525, 000528, 000535, 000567, 000593, 000594, 000649, 000655, 000658, 000659, 000663, 000678, 000686, 000710, 000711, 000731, 000752, 000756, 000763, 000785, 000792, 000793, 000796, 000800, 000820, 000829, 000830, 000857, 000860 - 000863, 000865, 000871, 000874 - 000890, 000892 - 000946

T10022: 000003, 000046, 000066, 000087, 000096, 000106, 000118, 000138, 000172, 000178, 000183, 000186, 000188, 000210, 000240, 000317, 000336, 000347, 000350, 000351, 000358, 000360, 000392, 000398, 000420, 000422, 000425, 000434 - 000453, 000456-000469, 000474

T10023: 000022, 000028, 000051, 000102, 000196, 000213, 000226, 000250, 000255, 000257, 000259 – 000261, 000263, 000271, 000280 - 000294

Problem description:

When there is a strong change in the measurement signal, several amplifier stages are automatically run through internally (Autorange). These amplifier stages have nothing to do with the user-adjustable measuring ranges (low, medium and high).

Due to an error in the firmware (version 2.05), individual measurement intervals (250 ms) can be lost in this non-visible (to the user) switching of the amplifier stages.

The switching of amplifier stages might not occur at all or only a few times when there is a single dose measurement (monitor calibration). Then the potential measurement error is very small. In addition, monitor calibration is always repeated several times, and it is very unlikely that the same measurement error is repeated several times.

However, if the amplifier stages are automatically switched during measurement several times, for example, during measurement of modulated fields or a scanned beam in particle therapy, the error can be added up and have a significant share in the measurement result.

Advice for users:

Users who use UNIDOS webline according to the above described application should update the firmware to version 2.06 prior to further use of the device.

For all other users PTW recommends using version 2.06 too. The firmware can be installed on the affected devices either by the (service) user himself or free of charge at PTW-Freiburg.

Measures taken by the manufacturer:

PTW has fixed the bug in the firmware and provides all affected users with a program for updating the firmware.

Communication of this safety notice:

This notice needs to be passed on all those who need to be aware within your organisation or to any organisation where the potentially affected devices have been transferred.