Service Note 01175171

Budapest, January 2024

Dear Customer,

We regret to inform you about a potential issue that may affect the performance of Simcenter T3ster SI LP220 modules in certain usage scenarios. It has come to our attention that the 20mA and 200mA current ranges of these modules may be susceptible to internal degradation under specific conditions.

Products affected:
All Simcenter T3ster SI LP220 modules, specifically, the 20mA and 200mA current ranges.

Issue Overview:
The identified concern arises when a current pulse occurs in the internal analog circuit of the current generator surpassing the safe operating range of certain components. Repeated exposure to these pulses may lead to degraded performance and, ultimately, the failure of the component or circuit.

This pulse occurs during the transition of the current generator from voltage-limited mode to current source operation, which can happen under the following conditions:

Step 1: The output of the Simcenter T3ster SI LP220 module is activated as a current generator that
a. Either is in open circuit (no load connected)
b. Or it reaches its set voltage limit

and then from this state
Step 2: the current generator is
  a. Either shorted
  b. Or turned off.

Required Preventive Actions/Workarounds:
To mitigate the potential risks associated with the above conditions, we kindly request all users to observe the following precautions until a permanent solution is released:

- Avoid changing the Device Under Test (DUT) wiring while the T3ster SI output is active. This includes both manual modifications and multiplexer switching.
- Refrain from activating an LP220 heating current output with no load connected (open circuit condition).
- Ensure that the LP220 current generator voltage limit is set high enough to remain above the load voltage, even during the heating phase.

Permanent Solution:
Our dedicated development team is working on a firmware update designed to prevent the critical conditions mentioned above. Once the update is ready, our Support Team will promptly notify all customers with instructions on how to implement the solution.

We understand the importance of ensuring the reliability and performance of our products and sincerely apologize for any inconvenience this may cause. If you have any immediate concerns or questions, please do not hesitate to contact our support team at support.sw.siemens.com.

Thank you for your understanding and cooperation.

Simcenter Customer Support