

Perugia

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Tracker Power Supply Status Report

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Summary

- TBS total dose test passed.
 - Power Group test at CERN and Geneva University.
 - Specifications for QM1 fixed.
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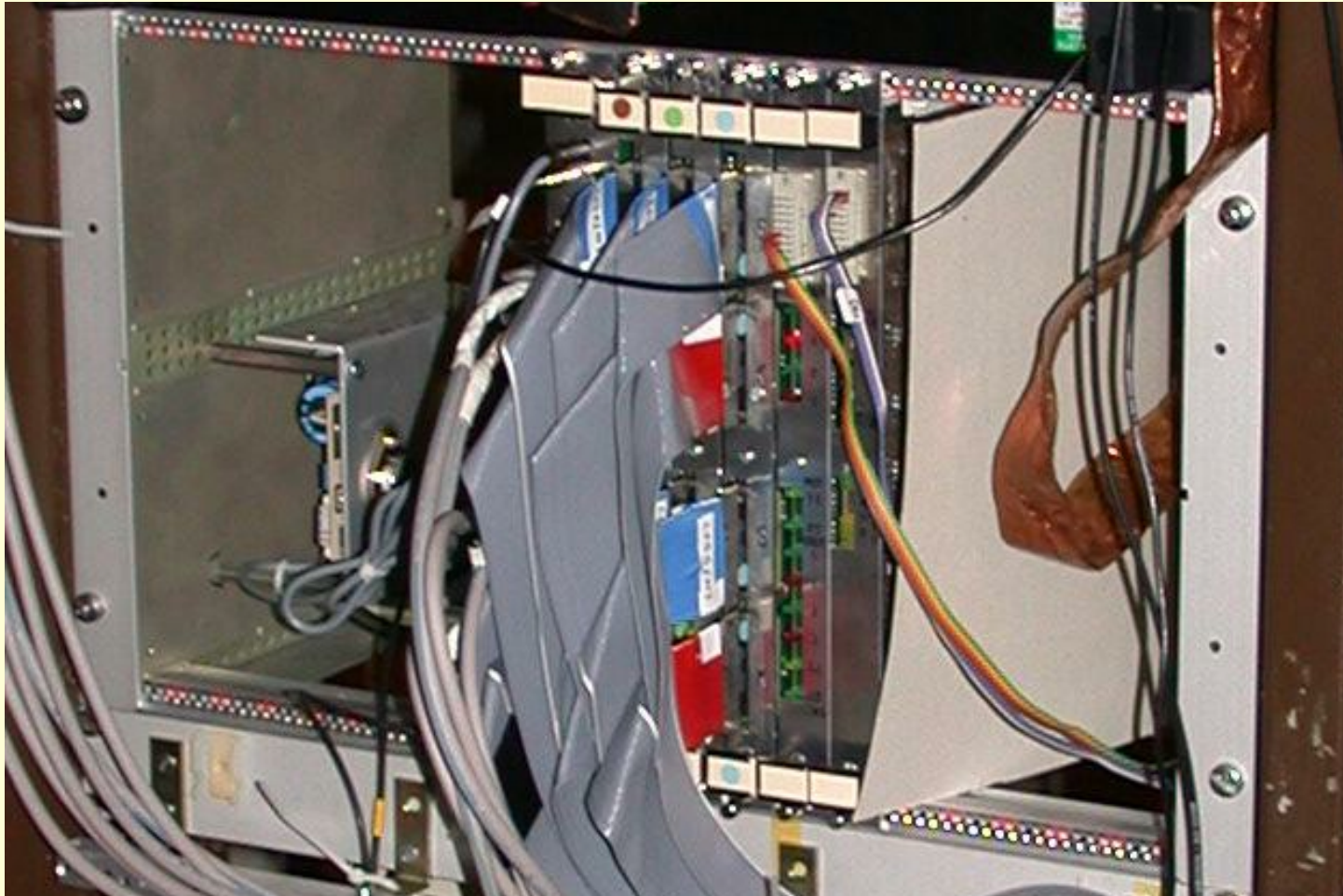
TBS total dose test

- TBS undergone total dose test at ENEA Casaccia in July.
 - Test was done according the ESA 22900 specifications.
 - The test showed no measurable degradation in performance.
 - We are going to test TPSFE in February
 - For the February test we also would like to test all DC-DC converters
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The DC-DC converter box





The mini EM crate





Calibration results

- The results of calibration gives 2.6 ADC counts as pedestal noise for the S side and 2.8 ADC counts for the K side
 - The common mode noise is: 4.4 ADC counts for S and 7.1 ADC counts for K.
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Specification for the tracker QM1-PS System


- A set of documents with all the specifications about the QM1 PS system for the tracker have been released (now available only in italian).





These documents specifies

- System description of the power supply in the framework of the Tracker and of the entire AMS instrument
 - The interconnections among the various boards (all signals and voltages).
 - The voltages and current ratings of all the boards
 - A preliminary specification of the qualification tests.
 - Mechanics and connectors.
 - Slow control function and implementation
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Recent features included in the documents

- SSF of TDR2 controlled from the TPSFE, SSF of JINF controlled from TBS
 - Output voltage from dc-dc converters of TPSFE reduced to +/-2.5V.
 - TPD filter specifications.
 - OR from Bias converter done with diodes OR from digital power done with MOSFETs
 - Each output of the 5.6V converter goes to a different USCM.
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