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#02-73 A test-bench for characterizing SDD-scintillator coupled detectors within the context of HERMES TP/SP nanosatellite mission.

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The main objective of the HERMES-Technologic and Scientific Pathfinder (HERMES-TP/SP) mission is to develop a cheap and scalable network of 3U nanosatellites to promptly detect, localize and probe high-energy astronomical transients such as Gamma-Ray Bursts and electromagnetic counterparts to gravitational waves events.

HERMES will be able to detect GRBs prompt emission over a broad energy band ranging from a few keV to MeV with high temporal resolution and localization accuracy. The key to achieve these ambitious goals is a simple yet innovative miniaturized detector design, in which Silicon Drift Detectors (SDD) play the double role of sensor for scintillation light and independent detector for low energy X-Ray.

In the present we illustrate the HERMES payload architecture and discuss the implementation and performances of a test-bench detector developed for characterizing GAGG:Ce scintillators - SDD coupling. This test-bench allow us to perform X and gamma-ray measurements using HERMES-like detector.

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