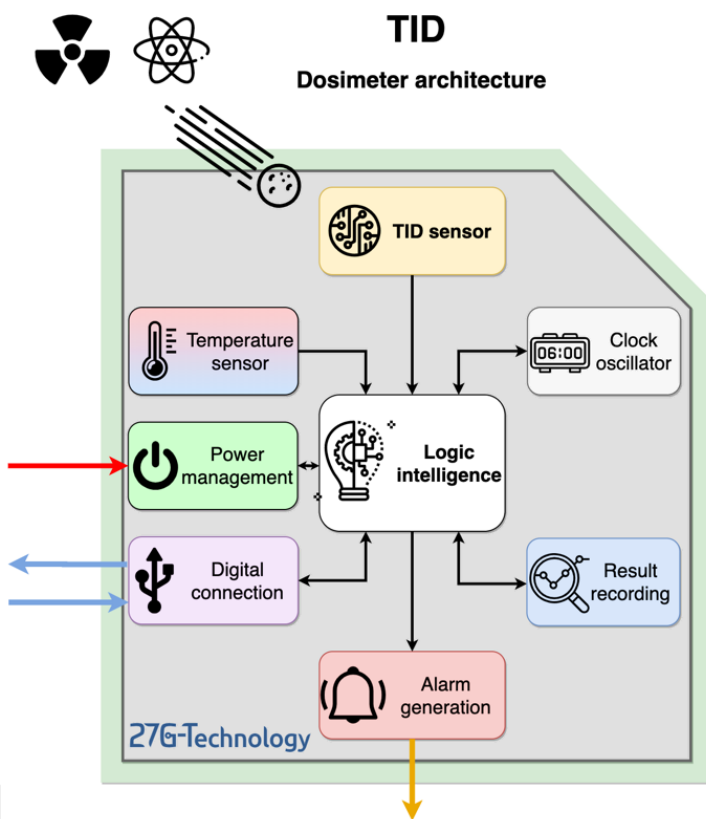


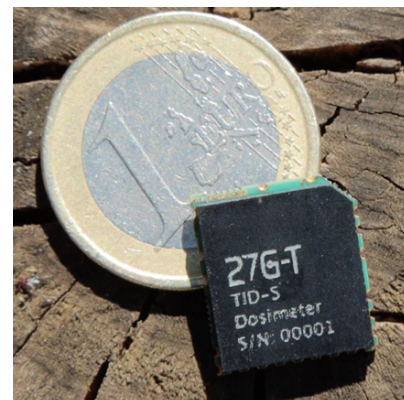
TID-S dosimeter features

- The world's smallest dosimeter
- Large measurable radiation range
- Ultra-low power consumption
- Dual sensors for high accuracy and reliability
- Automatic measurements
- Self-test
- Configurable alarms
- Digital communication
- Autosave function (result retention option)
- Internal temperature sensor
- Wide operational temperature range^{1*}
- Low frequency clock oscillator option^{2*}
- IP67 protection, dust resistant, low EMI^{3*}
- High shock and vibration resistant^{4*}
- Single power supply voltage
- Available for space applications
- TRL-9 flight proven solution⁵

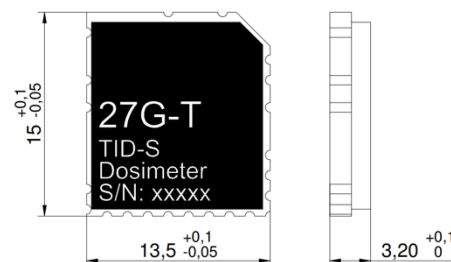


TID-S is a small electrical dosimeter module, optimized for size and sensitivity. These tiny instruments use semiconductor-based technology to sense and measure the total ionizing radiation that reached the electronics, including gamma, X-ray and proton radiations^{6*}. They are completely free of any hazardous materials and designed to easily fit modularly to any electronic system. This dosimeter could be useful for numerous purposes, wherever radiation sensing is important.

Applications may include space missions, scientific experiments, nuclear research, aviation safety, personal dosimetry purposes, industrial applications, and many more...



	Typ.
Dimensions	13.5×15×3.2 mm ^{7*}
Mass	< 1.5 g [*]
Sensitivity	1 to 10000 rad ^{8*}
Power usage	< 10 μW standby ^{9*} < 10 mW active
Supply Voltage	3.3 V ± 10 % ^{10*}
Communication	UART, USB, SPI, I ² C, <i>Bluetooth (featured)</i> ^{11*}



¹ -40°C to +85°C on request

² 32.768 kHz ± 20 ppm

³ Under qualification based on IEC 60529, MIL-STD-810, MIL-STD-461

⁴ Under qualification, 5000 g, 0.3 ms, ½ sine shock, 20g 10-2000 Hz vibration

⁵ PFM of the TID solution was a scientific payload of SMOG-P satellite

⁶ Neutron sensitivity under development

⁷ Can be further reduced

⁸ Down to 0.1 rad sensitivity and up to 100 krad versions featured, certified option available, under qualification based on IEC 17025, IEC 1283

⁹ For basic models

¹⁰ Low and high Voltage options available from 2.1 V to 5 V

¹¹ Several options available over UART, USB, SPI, I²C, RS424 protocols, redundant communication option

*Contact us for special requests, even if your option is not listed yet!

For more info please visit: www.27g-t.com

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