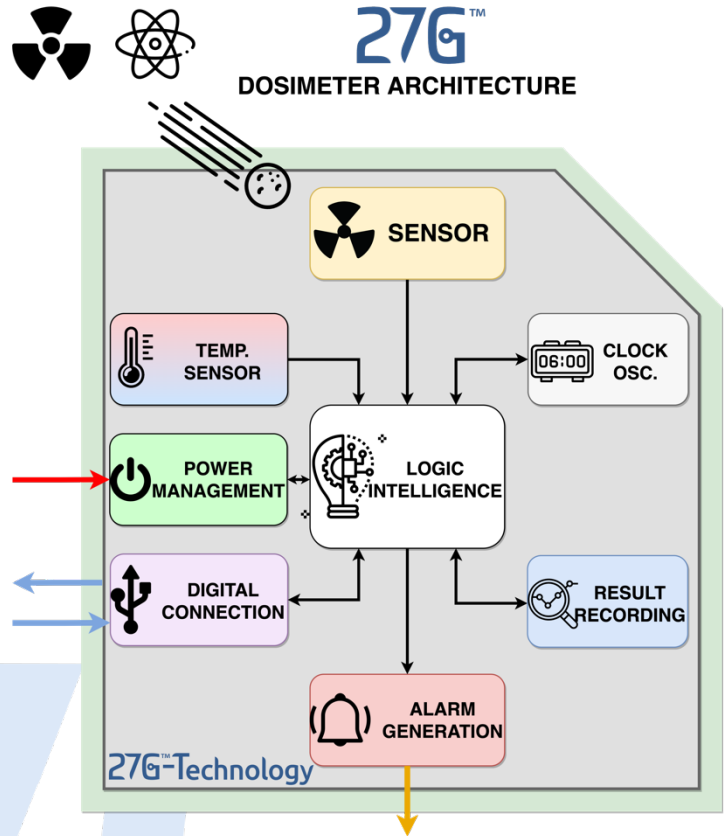
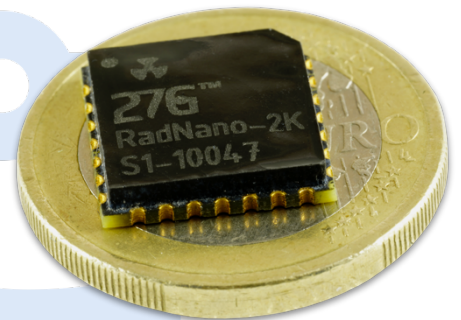


RadNano features

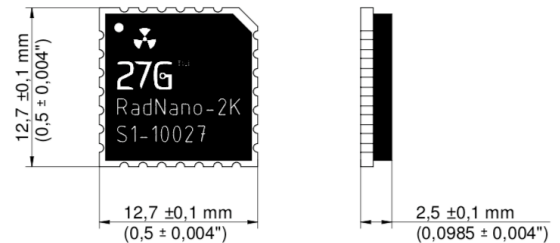
- The world's smallest dosimeter
- Large measurable radiation range
- Ultra-low power consumption
- Dual sensors for high accuracy and reliability
- Automatic measurements
- Self-test
- Configurable alarms
- Digital communication
- Autosave function (result retention option)
- Internal temperature sensors
- 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
- Space flight proven solution⁵



RadNano is a tiny electronic dosimeter module, optimized for small size and power consumption. These instruments use semiconductor-based technology to sense and measure the ionizing radiation that reached the electronics, including gamma, X-ray and high-energy 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 dosimetry is important. Applications may include space missions, scientific experiments, nuclear research, industrial applications, and many more...



	Typ.
Dimensions	12.7×12.7×2.5 mm ^{7*}
Mass	< 1.0 g [*]
Sensitivity	1mGy to 20/100/400 Gy ^{8*}
Power usage	< 10 μW standby ^{9*} < 10 mW active
Supply Voltage	3.3 V or 5V ± 10 % ^{10*}
Communication	UART and other protocols ^{11*}
Reliability	MTTF > 1.1 M hours (50°C, MIL-HB-217F)



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, MIL-STD-810.

⁵ PFM of the solution is proven in space on the mission of SMOG-P and SMOG-1 satellites.

⁶ Neutron sensitivity under development.

⁷ Can be further reduced.

⁸ 2K, 10K and 40K rad(Si), (2K, XK, LK models respectively). Certified option, under qualification based on ESCC 22900, IEC 17025, IEC 1283.

⁹ For basic models.

¹⁰ Low and high Voltage options available from 2.1 V to 5 V, please refer the RadNano Application Note for further information!

¹¹ Several options available over UART, USB, SPI, I²C, RS424 protocols, redundant communication option, Bluetooth version featured.

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

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