Reuter-Stokes

Quality by design

Merging the efforts of nuclear physicists and electrical, chemical, and mechanical engineers, we are committed to developing the industry's most accurate and reliable gamma sensing technology.

- Backed by the quality and expertise gained through decades in the downhole logging industry.
- Rigorous and extensive testing at every stage of the design, qualification, and production processes.
- Radial suspension system minimizes the radial space needed to isolate the crystal from vibration. This allows for larger crystals to be packaged inside the gamma sensor's housing.
- Thin wall titanium housings minimize gamma attenuation for better gamma radiation transmission at lower energies.

Benefits

- Operating temperatures to 200˚C (392˚F)
- Shock survivability to 1,000 g
- Random vibration rating of 20 grms
- Fully customizable

Gamma Sensors

Scintillation gamma sensors for improving your downhole sensing technology operation

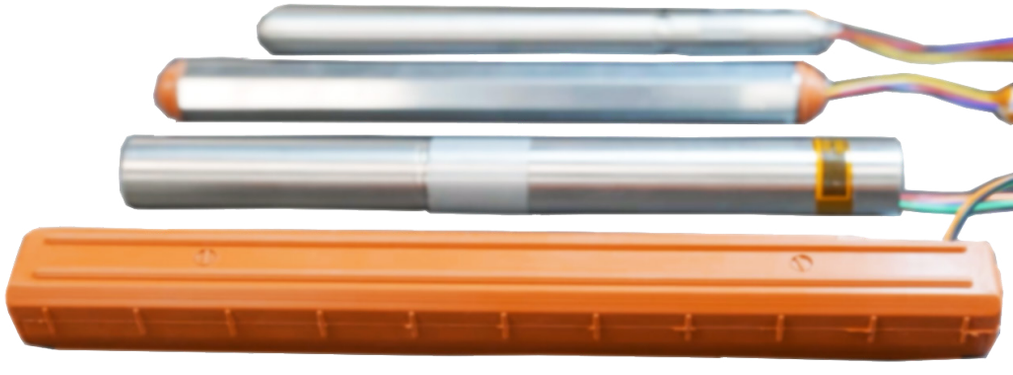
Reuter-Stokes tailors every scintillation detector to your exact specifications. We provide a broad range of gamma detector configurations, including virtually any crystal size, mounting and interface adaptations, as well as built-in radioactive check sources.

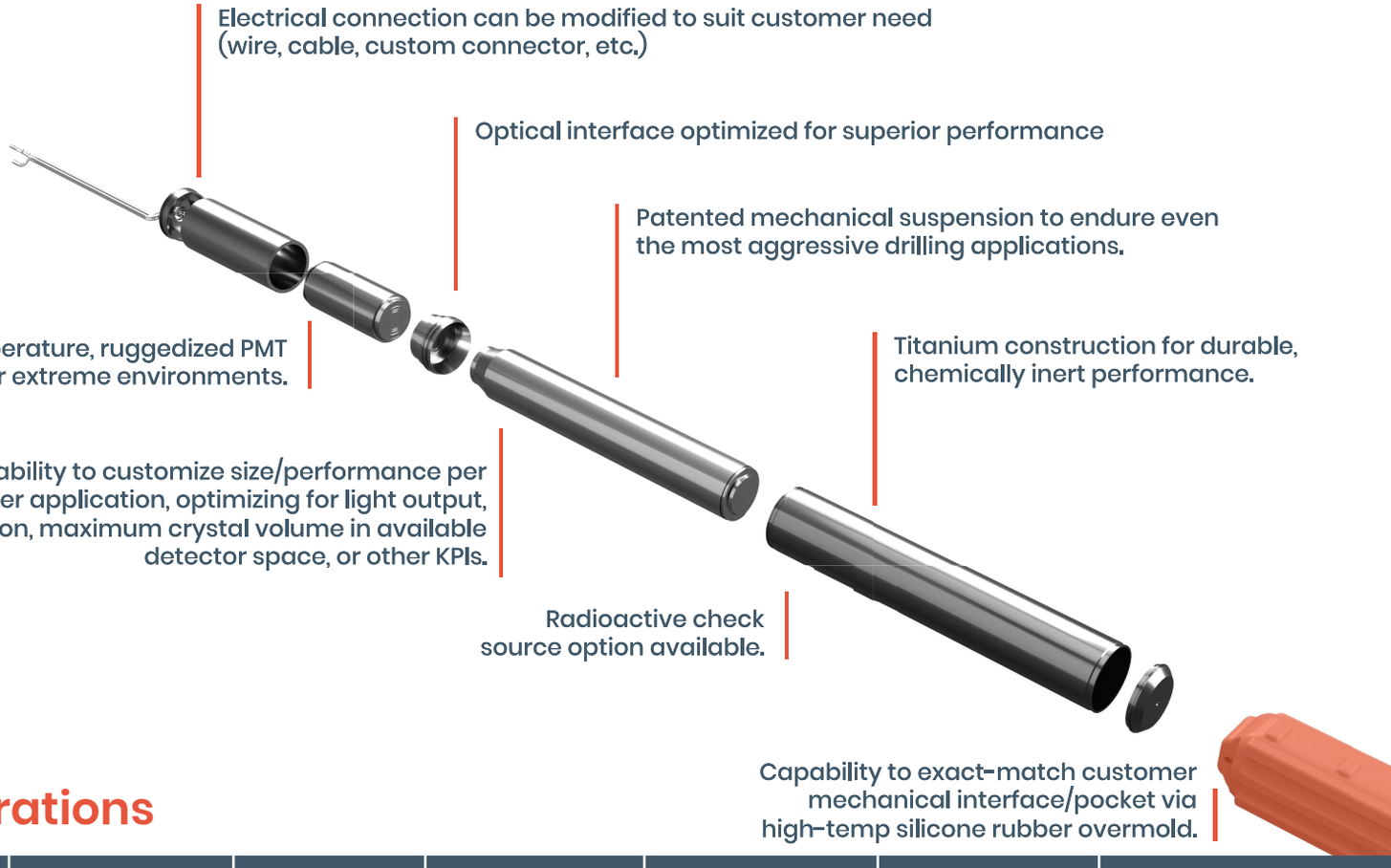
The assembly's high-strength sapphire window, combined with a patented optical coupler, allows for maximum light output.

Validated by extreme temperature, vibration, and shock testing, performance in high shock and vibration environments is ensured with technology such as the Flexible Dynamic Sleeve and our patented spring suspension system, protecting the scintillation crystal from the dynamic environment.

Delivering one of the industry's highest sensitivities, our gamma sensors provide geologists and operators with the precise measurements required for accurate formation location and identification. Higher sensitivity can help customers log faster or reduce the size of the detectors for more compact tools and thinner bed resolution.

Thin wall titanium housings minimize gamma attenuation for better gamma radiation transmission at lower energies. These features allow customers to operate downhole confidently, **even in the most severe conditions.**





Configurations

Part #	Sensor Diameter	Sensor Length	Window Diameter	Thread	Crystal Diameter	Crystal Length
RS-S1-0646-000	1”	4.8”	0.787”	15/16-32 UN-2A	0.841”	4.32”
RS-S3-0710-000	1”	1.453”	0.787”	15/16-32 UN-2A	0.841”	0.98”
RS-S3-0724-000	1”	2.938”	0.787”	15/16-32 UN-2A	0.841”	2.48”
RS-S1-0740-000	0.875”	4”	0.662”	13/16-32 UN-2A	0.707”	3.387”
RS-S1-0828-000	1.125”	2.875”	0.907”	11/16-28 UN-2A	0.948”	1.98”
RS-S1-1046-000	1.375”	4.8”	1.157”	1 5/16-28 UN-2A	1.212”	4.171”

The above list is a small sample of crystal packages we manufacture. Reuter-Stokes designs and manufactures crystal packages to customer specifications, from 0.50” diameter x 0.50” length to 2.00” diameter x 12” length.

Ready to start the customization process? Talk to an expert.

reuter-stokes.com

Specifications

Crystal materials	NaI
Detector sizes	Up to 2” (50.8 mm) outside diameter; Up to 12” (304.8 mm) length
Pulse height resolution	25°C PHR <9%, 150°C PHR <12.5%, 175°C PHR <15%
Vibration	Up to 20 grms, 10 to 1,000 Hz
Shock	Up to 1,000 g., 0.5 ms duration
Operating temperature range	-32°C to 200°C (-26°F to 392°F)
Check sources available	Cs-137

Reuter-Stokes