

The Thermo Scientific P 211 is designed so that zero neutrons are produced between pulses.

## Thermo Scientific P 211 Neutron Generator

Pulsed accelerating voltage and ion source



The Thermo Scientific P 211 is designed such that both the accelerating voltage and ion source are pulsed. This assures that no neutrons are produced between pulses. This feature is critical for applications that depend upon measuring the variations of neutron populations following the source burst. One such application is the assay of transuranic materials in waste. The P 211 neutron tube was originally designed by Sandia National Laboratories and incorporates the Sandia-designed "Zetatron" neutron tube. Thermo Fisher Scientific is now the only manufacturer of the Zetatron neutron tube.

### Features

- Neutron die-away measurements
- Pulses both accelerating voltage and ion source
- No background between pulses

### Applications

- Transuranic waste assay
- Fissionable Materials

## Thermo Scientific P 211 Neutron Generator

### Technical Specifications

Neutron Output	1.0E+06 n/pulse
Neutron Yield	1.0E+08 n/sec @ 100 Hz
Tube Lifetime	Up to 500 hours or greater
Pulse Rate	10 Hz, 50 Hz, 100 Hz, single shot
Pulse Width	~10 µsec
Safety Features	Keyed ON/OFF switch, User configurable interlocks

### General Specifications

Analysis Methods	Neutron die-away
Generator Characteristic	Pulsed output (no background between pulses)
Primary Elements Detected	U, Pu

### About Thermo Fisher Scientific

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