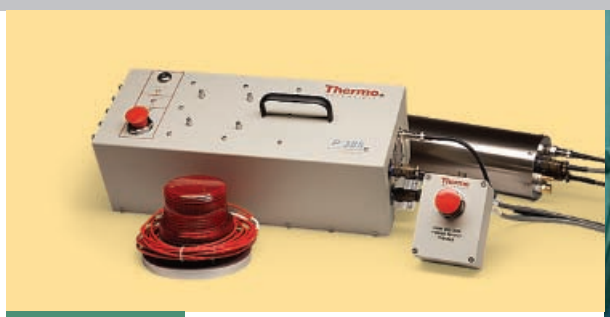
The P 385 produces the highest yield that doesn't require active cooling. It is compact and has very good operating economies because of its long-life neutron tube design

Product Specifications

Thermo Scientific P 385

High output, long-life neutron generator for field or laboratory applications



Benefits

- Longer tube life
- Higher output
- Modern digital control
- Advanced functions
- Excellent economics
- Higher flux at target plane and end cap

Applications

- Explosives detection
- Bulk materials analysis
- WMD detection
- UXO analysis
- Contraband detection
- Vehicle inspection

The Thermo Scientific P 385 Neutron Generator incorporates the next-generation of digital control. The operating options include a setting for manual start and stop; a run timer setting; or a specified number of pulses setting. There are three auxiliary outputs: one is synchronized with the pulse and the other two are adjustable relative to the pulse signal. Extensive safety features are designed into the P 385. Key-lock and external interlocks are built-in while the Smart Lamp senses light and current.

The P 385 is designed for longevity and lifetime cost savings. The accelerator head contains a longer-life tube than other neutron generators on the market, with an expected lifetime of 4,500 hours at 10^8 n/s. This provides a higher output than other comparable models. Additionally, the cost per billion neutrons produced is about $0.05, 15% less than other brands.

The P 385 operates with a graphical interface or text commands and can be run on PC, Apple and most other platforms. Included is an integrated high voltage power supply which eliminates bulky external high-voltage cables. This product has a DOT exemption, which allows it to ship fully pressurized, simplifying transport logistics and planning.

Thermo Scientific P 385 Neutron Generator

Technical Specifications	
Neutron Yield, nominal	3.0E+08 n/s
Neutron Yield, maximum	5.0E+08 n/s
Operating Voltage	-40 kV to -130 kV
Typical Lifetime	1,500 hours @ 3.0E+08 n/s output level 4,500 hours @ 10^8 n/s output level
Pulse Range	250 Hz to 20 kHz
Duty Cycle	5% to 100%
Minimum Pulse Width	5 µsec
Pulse Rise / Fall Time	<1.5 / 0.5 µsec
Accelerator Head	102 mm (4.0 in) diameter, 686 mm (27.0 in) long; ~12 kg (~26.4 lb)
Target Plane to End Cap	114 mm (4.5 in)
Electronics Enclosure	490 mm (19.3 in) x 178 mm (7.0 in) x 178 mm (7.0 in); ~5 kg (~11.02 lb)
Power Consumption	~ 75 watts
Control Interface	RS-232, RS-422, or RS-485
Software	Open source text or GUI
Safety Features	Key lock: on/off Emergency: on/off; one on electronics enclosure, one remote Normal-open and Normal-closed contacts Automatic pressure switch interlock on accelerator head Warning lamp flashes when operating; senses current draw and light production

About Thermo Fisher Scientific

Thermo Fisher Scientific (NYSE: TMO) is the world leader in serving science, enabling our customers to make the world healthier, cleaner and safer. With an annual revenue stream of more than $9 billion, we employ 30,000 people and serve over 250,000 customers within pharmaceutical and biotech companies, hospitals and clinical diagnostic labs, universities, research institutions and government agencies as well as environmental and industrial processing settings. Serving our customers through two premier brands, Thermo Scientific and Fisher Scientific, we help solve analytical challenges from routine testing to complex research and discovery.

Thermo Scientific offers customers a complete range of high-end analytical instruments as well as laboratory equipment, software, services, consumables and reagents to enable integrated laboratory workflow solutions. Fisher Scientific provides a complete portfolio of laboratory equipment, chemicals, supplies and services used in healthcare, scientific research, safety and education. Together, we offer the most convenient purchasing options to customers and continuously advance our technologies to accelerate the pace of scientific discovery, enhance value for customers and fuel growth for shareholders and employees alike.

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