

NSD-70-P DD / DT Pulsed Neutron Generator



- Emergency stop and door switch external interlock loops
- Remote connection watchdog
- UN2911 Class 7 accepted transport package
- Dosimeter integration option
- No SF6
- Gas is stored in a solid getter pump for vacuum pressure at room temperature



Specifications

- Neutron yield $\sim 2.6E6$ DT n/pulse 4sr max^*
- DT 14 MeV option $\sim 60 \times$ DD output.
- DD 2.5 MeV neutrons or TT neutrons
- Greater than 20,000 hour lifetime (estimated)
- Pulsed operation only
- Pulse rate: single shot, 2 Hz to 2 kHz
- Maximum n/s output at 1 kHz ($\sim 2.6e9$ DT n/s) with 4 Pulsed Power Units*
- min. 1, max. 8 PPU's for more current per pulse
- Pulse duration: min. 0.7 μsec FWHM, max. $\sim 18\mu\text{sec}$
- Rise and fall time: $\sim 1\mu\text{sec}$
- Regulated pulsed HV for very stable pulse to pulse repeatability
- High stability, repeatability
- Very low jitter
- Synchronizing "TTL" signal
- Outer casing is at ground potential
- Closed loop water cooling
- Neutron emission module ~ 12 kg
- Input power 400Vac $\pm 10\%$ 3-phase with neutral 50-60 Hz $\sim 3\text{kW}$
- VNC remote control over LAN