

Tri-Carb 2900TR Liquid Scintillation Analyzer

The Tri-Carb®2900TR (Perkin Elmer) is a computer-controlled benchtop liquid scintillation analyzer for detecting small amounts of alpha, beta and gamma radioactivity



Standard instrument features

QuantaSmart™ software for the Windows XP® operating system

Robust downloading sample charger mechanism with a double light sealing shutter, allows the photo multiplier tube detectors to remain on for maximum stability even during sample changing

Multi-parameter linear MCA (Multichannel Analyzer) with a resolution of 1/10 keV, offers an extended dynamic quench range and provides multi-parameter spectrum analysis to correct for luminescence, color quenching and background radiation

A cassette-loaded bi-directional sample conveyor mechanism is standard with a sample capacity of 408 standard 20 mL vials

SIS (Spectral Index of Samples) quench indicating parameter determines counting efficiency by analysis of sample spectrum

Quench standard spectra are factory installed for single and dual label counting of ^3H and ^{14}C samples. Quench standard spectra are stored for both Ultima Gold™ liquid scintillation cocktail samples and toluene- or xylene-based samples

60 user protocol option upgrades the 2900TR to allow for 60 user programming capability

Typical performance data

Energy range: 0-2,000 keV

Efficiency, Normal count mode:

		Minimum acceptable
^3H	0-18,6 keV	60%
^{14}C	4-156 eV	95%

Physical data

Electrical requirements:

220 Vac + 10%, 50/60 Hz, 10 amp protection

Power Consumption:

<900 VA; 1,150 VA with temperature control option

Operating ambient temperature: 15-35°C

Operating relative humidity: 30-85%