HPLC ANALYSIS

CTS-300 Compact HPLC Analyzer

A bench-top HPLC with its own control and reporting software, built for small businesses and QC teams that want results the same day instead of waiting on an outside lab. Used by universities, research labs, commercial testing labs and government departments worldwide.

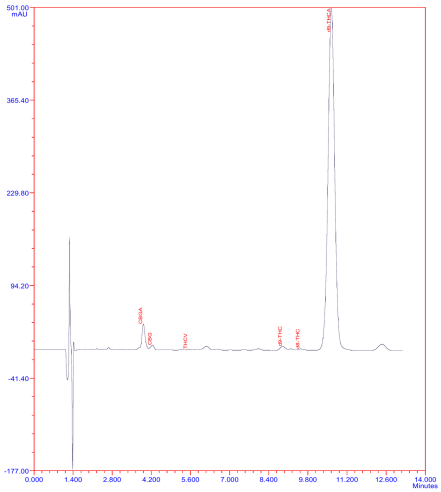


Highlights

- Reciprocating pump, 0.001–5 mL/min, up to 6,300 psi
- UV/VIS detector, 180–680 nm
- Rheodyne 7725i manual injector, or autosampler for unattended runs
- Temperature-controlled column compartment
- CTI HPLC software included; CTI LIMS optional
- NIST-traceable calibration, certificate included
- Took part in the NIST Laboratory Quality Assurance Program (about 140 North American labs)

Methods

Cannabinoid Potency Kit Column, solvents, standards and method for cannabinoid potency.	**Terpene Profile Kit** Column, solvents, standards and method for terpene profiling.	**Custom method development** Your analytes and matrix, delivered as a validated method with SOP.



A real cannabinoid potency run on the CTS-300 with the Cannabinoid kit method. Labelled peaks include CBGA, CBG, THCV, Δ9-THC, Δ8-THC and Δ9-THCA; the full run finishes in 13.2 minutes.

Specifications

System

Pump	Reciprocating
Detector	UV/VIS
Injector	Rheodyne 7725i manual injector, or autosampler
Column compartment	Temperature-controlled
Software	CTI HPLC software included. CTI LIMS optional
Calibration	NIST-traceable, certificate included

Pump performance

Flow rate	0.001–5 mL/min
Maximum pressure	6,300 psi
Flow accuracy	≤ ±1%
Flow precision	RSD < 0.1%
Qualitative repeatability	RSD ≤ 0.2% (naphthalene/methanol standards)
Quantitative repeatability	RSD ≤ 0.5% (naphthalene/methanol standards)

Detector performance

Wavelength range	180–680 nm
Spectral bandwidth	8 nm
Wavelength accuracy	±1 nm
Wavelength precision	< 0.1 nm
Noise	≤ 0.25×10^{-5} AU

General

Run time per sample	Depends on the method; 13.2 min for cannabinoid potency
Dimensions	18 × 9 × 10.5 in (457 × 229 × 267 mm)
Weight	45 lb (20.4 kg)
Power	110 V or 220 V
Warranty	1 year; UV lamp and column 90 days

Get a formal quote
Configure your system at ctinstrumentsglobal.com/product/liquid-chromatograph/ or email info@ctinstrumentsglobal.com. We reply with a formal quote, including shipping, within 1 business day. Live online demos: cal.com/dusank/hplc-demo