SRI 310MM Cannabis and Hemp Gas Chromatograph Configurations

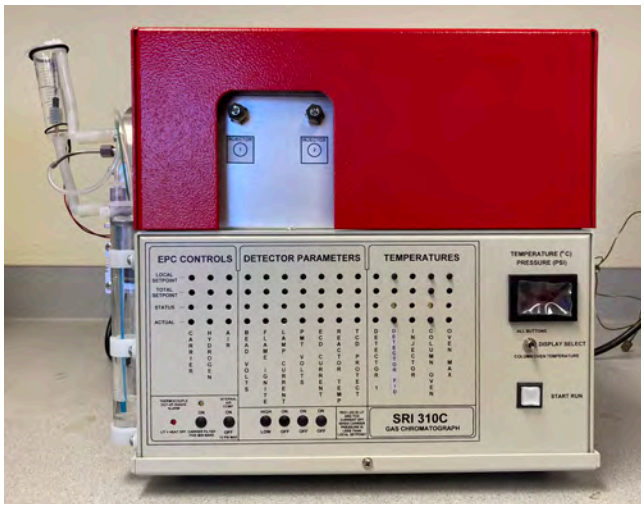
SRI Instruments can configure a gas chromatograph (called "GC" for short) in hundreds of ways to perform almost any analysis. All SRI Instruments GCs are portable, and easily shipped by UPS, FedEx, and even as airline baggage.

Cannabis and hemp contain many active cannabinoid compounds, but three are considered particularly important, **cannabidiol (CBD), delta-9-THC (THC), and cannabinol (CBN).** A GC is the perfect tool for measuring the amount of these three compounds in plant material, resin, tinctures and edibles. Other analytical techniques such as HPLC and GC/MS can also be used, but are much more expensive to buy, and vastly more complicated to operate, yet they do NOT provide superior data. For this analysis, GC is the best solution. Unlike a HPLC, the GC naturally de-carboxylates the THCA (the original molecule produced by the plant) into Delta-9-THC saving a processing and reporting step. In addition, with derivatization, GC can even measure THCA in cannabis samples. Total cost to perform a GC analysis is less than one dollar, requires only 0.1 gram of sample, and takes about ten minutes.

Two configurations have become popular for measuring medical cannabis.

1) **Cannabinoid, terpene, and residual solvent testing; and**

2) **Cannabinoids in edible products**



Comes with a heavy duty shipping case.

Weighs about 35 pounds (16 kilo-grams)

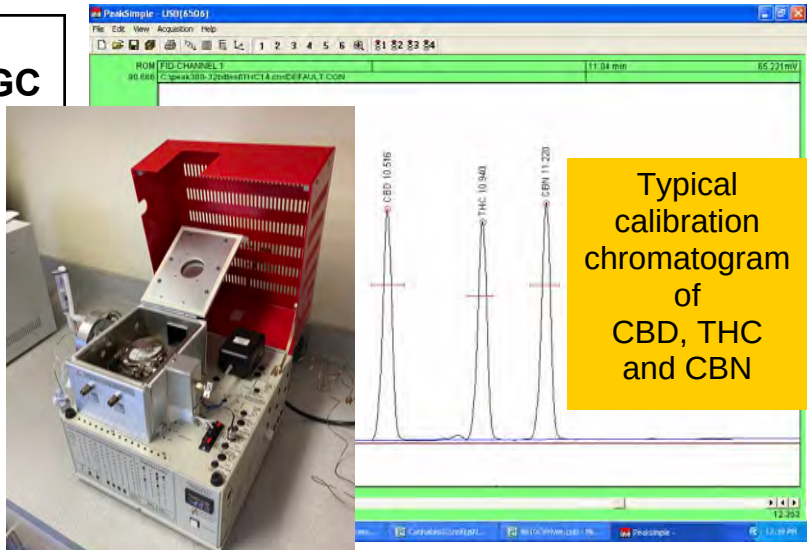
SRI Tech Support 310-214-5092
www.srigc.com

SRI 310MM Cannabis and Hemp GC
Configuration #1 - Cannabis and Hemp GC

Configuration #1
310MM Cannabis and Hemp GC

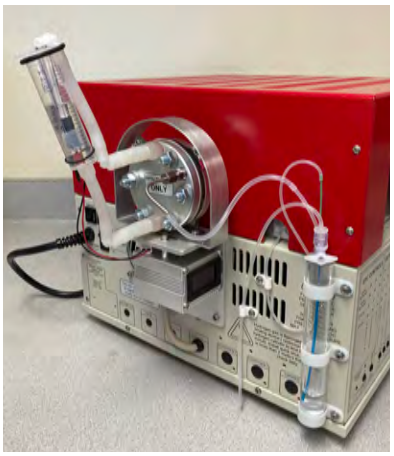
Part# 0310-0091 $11,134.00

(2022 pricing, prices subject to change, consult most recent price list.)



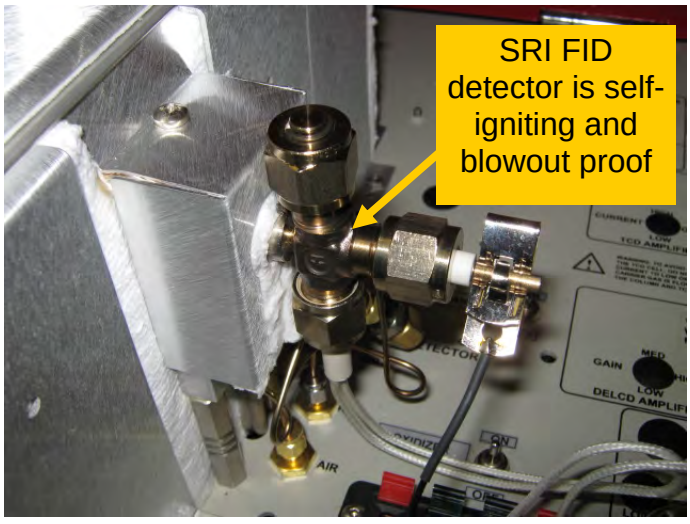
Typical calibration chromatogram of CBD, THC and CBN

This GC configuration includes an FID (flame ionization detector), built-in hydrogen generator, built-in air compressor, MXT 502.2 capillary columns for cannabinoid and terpene measurement, and Hayesep D packed column for residual solvent measurement.



This GC configuration is appropriate for users with prior GC experience, for those who want to be equipped with industry-standard hardware, or even first-time operators with little to no gas chromatography experience.

Run times can be as short as 3 to 4 minutes while the standard 12-minute run optimizes both speed and separation.



Users will need a Windows computer and AC power. Syringes, a starter pack of vials, balance, and other accessories are included with the purchase of a 310MM GC.

SRI 310MM Cannabis and Hemp GC Configuration #2 - Edibles Cannabis Products

Configuration #2
310MM Edibles Cannabis Products GC

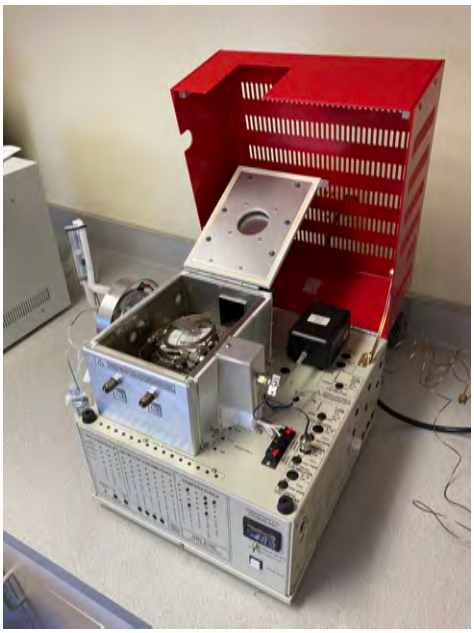
Part# 0310-0095 $12,896.00

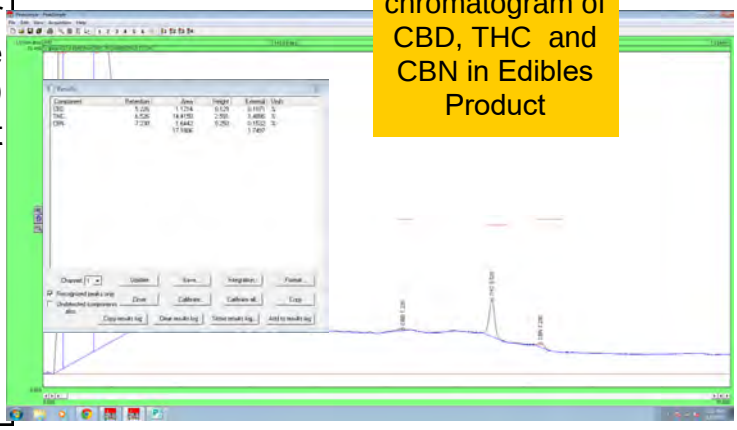
(2022 pricing, prices subject to change, consult most recent price list.)

While the 310MM Edibles Cannabis and Hemp GC is nearly-identical looking to the standard 310MM GC configuration, the addition of extra hardware allows for a **pre-column backflush, which traps oils and other sample matrixes while allowing the cannabinoids to go through the analysis.** This feature makes this GC incredibly useful for anyone seeking to analyze edible cannabis or hemp samples without having to go through special sample preparation steps.

Other than the ability to conveniently analyze edible samples, the 310MM Edibles GC is functionally equivalent to the standard 310MM configuration and includes an FID (flame ionization detector), built-in hydrogen generator, built-in air compressor, MXT 502.2 capillary columns for cannabinoid and terpene measurement, and Hayesep D packed column for residual solvent measurement.

Users will need a Windows computer and AC power. Syringes, a starter pack of vials, balance, and other accessories are included with 310MM GC purchase.





Typical chromatogram of CBD, THC and CBN in Edibles Product