



Smart Cannabis & Hemp Analysis





Be Certain. Stop Guessing.

Our Vision

To improve the health and wellbeing of individuals and communities by setting the standard for cannabis quality.

Quality Control Today

I never know if the cannabis I get is right for me. Sometimes it gives me anxiety and I cannot sleep. I wish the labels were as accurate as with all other medications.

Cancer Patient Testimonial,
Israel



Today's Challenges

Lack of Trust

Anecdotal Evidence

Uncertainty

Quality Issues

Quality isn't just about providing a better product,
it's about building trust with consumers and regulators.

Why Choose GemmaCert®

Global Innovation



Specificity

Distinguish between Cannabis & Hemp (THC < 0.2%)

Market Pioneer



Improving over Time

Over-the-air software updates improve performance and user experience

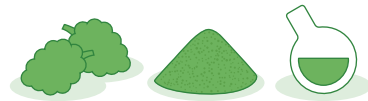
Unique Technology



Non-Destructive

No Sample Preparation
No Sample Distraction

Global Innovation



Multifunctional

Test Total THC, CBD & Water Activity in 3 modes:
Whole flower, Ground, Extract

Simple, Sleek & Smart



The industry winners will be those who will invest in Quality Control to ensure that products are consistent, safe, effective and predictable.

Dr. Guy Setton,
Founder & CEO, GemmaCert

With GemmaCert we saved 18% on our latest purchase of cannabis flowers.

Our supplier claimed the flowers he delivered had a THC level of 22% but with GemmaCert we tested flowers on the spot and discovered that the THC level was 16%.

We bought the flowers for EUR 18,000 instead of the original asking price of EUR 22,000.

Coffeeshop Manager,
Amsterdam



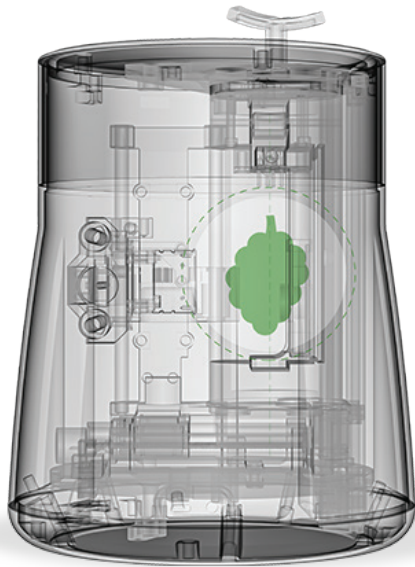
What's Powers GemmaCert®?

Cloud-based patented
AI-driven real-time
solution

Spectroscopy, image
analysis and motion
mechanics

World's largest database
of flower spectra

Operated by
smartphone app

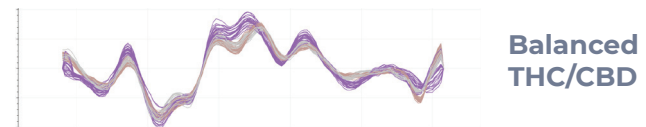
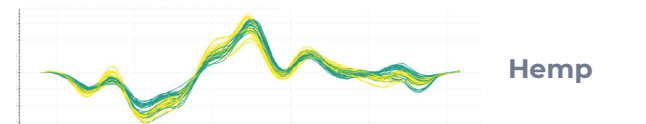
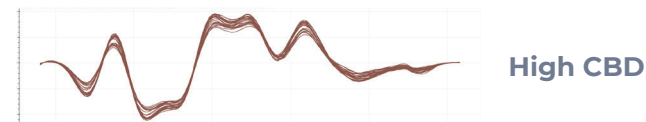
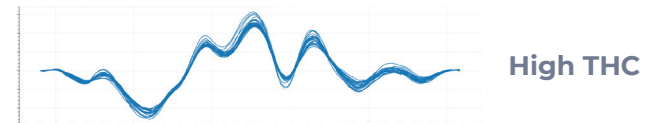


U.S. Patent No. US10458908B2



What's Really Inside Your Cannabis?

Each cannabis flower is special and each one has its unique spectral fingerprint which GemmaCert accurately analyzes applying advanced data analytics.



The GemmaCert® Solution is The Business Tool for Cannabis Professionals



**Breeders &
Growers**



**Extract
Producers**



**Pharmacies &
Clinics**



**Dispensaries &
Coffee Shops**

Technical Information & Specs

In house cannabis verification and potency analysis, measuring:

Total THC: 0.877 THCA + Delta-9-THC

Total CBD: 0.877 CBDA + CBD

Water Activity (aw): <0.55-0.65> (reported on whole flower only)

Testing Modes:

Dry whole flower buds with 15% maximum moisture content

Ground material, including trim and biomass

Crude oil (currently raw ethanol extract only)

What technology does it use: NIR Spectroscopy, Image Analysis and Data Analytics

How long does an analysis take: Between 2 to 5 minutes

Is any sample preparation required: No

Sample usability after testing: Nondestructive testing – sample left intact after analysis

Calibration requirement: Automatic (no periodic or manual calibrations required)

User interface: Android V5 and up (iOS compatibility coming soon)

Components: Spectrometer, Illumination, Camera, Motion System, Control and Communications Module

Results Thresholds:

Minimum detection limit for flowers/trim/extract: 0.2% THC/CBD

Maximum detection limit for flowers/trim: 30% THC, 20% CBD

Maximum detection limit for extract: 70% THC, 60% CBD

Accuracy: -Flowers/Ground:

RMSE 1

Within +/-10% of actual potency for both THC & CBD

ie, If actual potency is 8% THC, GemmaCert will report anywhere between 7.2% to 8.8% THC

-Extract:

CBD: +/- 2.5%

THC: +/- 6%

Portability: Portable desktop unit

Connectivity: Bluetooth

Power source: 6vdc by standard 110/220 ac2dc power supply

Storage temperature: -10c to +45c (14F - 113F)

Operating temperature: +10c to +35c (50F - 95F)

Dimensions: Height 224mm; Diameter top 144mm; bottom 166mm

Weight: 1958g (including power supply)

Regulatory compliance: CE | TuV | RoHS | German Pharmacopeia IEC/EN standards (61010-1:2010, EN 61000-6-1:2007, EN 61000-6-3:2007 + A1:2011, ETSI EN 300 328 V2.1.1, UL/CSA 61010-1,FCC part 15B, ICES-003, EN 301489-1, EN 301489-17, EN 61326-1)

Maintenance: Occasional simple cleaning of spectrometer using alcohol wipe of spectrometer and disposal of leftover cannabis

Warranty: Lifetime warranty



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www.gemmacert.com

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