

# **AROMETRIX PRODUCT SPECIFICATIONS**

## AROMETRIX FRACTION FINDER

#### **SYSTEM**

Creator: Arometrix, Inc.

Application(s): Botanical distillation (short

path, wiped film, thin film, etc.)
State of Materials: Distillates
Expected Life Span: 10+ years
Shipping Weight: 5 lbs

Shipping Dimensions: 10"x10"x8"

**Technology Validation Reference:** "In Situ Fluorescence Spectroscopy for In-Line Distillation Process Monitoring",

peer-reviewed article <u>published</u> in Cannabis

Science & Technology

#### **SENSOR**

**Type:** Standard

**Technology:** In-situ fluorescence spectroscopy

Wavelength of excitation: 365 nm Sensor Size(s): Size 29; Size 34 Interface Requirements:

Size 29 glass (28-30mm outer diameter)

• Size 34 Glass (31-34mm outer diameter)

• Or install on Arometrix <u>adapters</u>

\*Do not use on double-jacketed glass
 Cable Length: 2' standard (available up to 30')

Max Temp: 100C Min Temp: 5C

Optical Detection Range: 300 – 1000 nanometers Lower Detection Limit: Less than 1 mg/mL Accuracy: Spectral resolution is 15 nm max

Margin for Error: Not applicable to qualitative measurements

Scans per second: 3

Flow Rate Limits: No flow rate limit

Min Fill Level: 1/8 volume

#### **DISPLAY**

**Type**: 7 inch LCD TFT display (contains a compute module)

Power: 100-240VAC 50/60 Hz CE Rated (12 Volt 1 Amp into Display)

**Power:** UL-marked power supply

**Mount:** Mounts to a laboratory stand bracket (pole up to ½" thick)

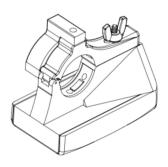
Units: Wavelength Nanometers (nm); Intensity Values (arbitrary units - au)

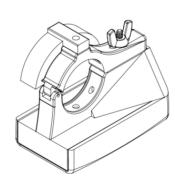
Plots: Spectrogram; Wavelength Intensity graph

Metric Type: Qualitative Telemetry Options: USB

PLC Communication Type: Serial UART (BAUD: 115200, DATABITS: 8, STOPBITS: 1, PARITY: NONE)







# AROMETRIX FRACTION FINDER ULTRA

#### **SYSTEM**

**Creator:** Arometrix, Inc.

**Application(s):** Botanical chromatography;

botanical distillation

**State of Materials:** Isolates, Distillates

**Expected Life Span:** 10+ years

Shipping Weight: 5 lbs

**Shipping Dimensions:** 10"x10"x8"

#### **SENSOR**

Type: "Ultra-sensitive"

**Technology:** In-situ fluorescence spectroscopy

Wavelength of excitation: 365 nm

Size(s): Size 34 only Interface Requirements:

Size 34 Glass (31-34mm outer diameter)

• Or install on Arometrix <u>adapters</u>

\*Do not use on double-jacketed glass

Cable Length: 2' standard (up to 30')

Max Temp: 100C Min Temp: 5C

Optical Detection Range: 300 – 1000 nanometers

Lower Detection Limit: Less than 0.1 mg/mL (over 10X more

sensitivity) than the *Fraction Finder* sensor **Accuracy:** Spectral resolution is 15 nm max

Margin for Error: Not applicable to qualitative measurements

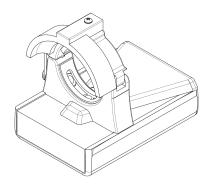
Scans per second: 3

Flow Rate Limits: No flow rate limit

Min Fill Level: 1/8 volume

**DISPLAY -** Same as standard FRACTION FINDER





## AROMETRIX EXTRACTION FINDER

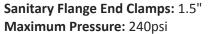
#### **SYSTEM**

**Applications:** Botanical extraction & refinement processes (C1D2-compliant); C1D1 peer review currently in process **Relevant Molecular Indicators:** Acidified

Cannabinoids; Chlorophyll; Lipids

**Technology:** Fluorescence spectroscopy **Display:** 7" LCD TFT touch-screen; compute module housed in a pole-mounted ABS case **Power:** UL-marked power supply with 10' extension cable for use outside of C1D1 area **Sensor:** UV light source and full wavelength

spectrometer; intrinsically safe
Wavelength of Excitation: 365 nm
Optical Detection Range: 300 – 1000 nm
Lower Detection Limit: < 0.1 mg/mL
Spectral Resolution: 15 nm max
Flow Rate Limit: No flow rate limit



Temperature: -100°F (min); 100°F (max)
Mounting Plate: Available as an add-on
Product Dimensions: 6.79in (L) x 5.39in (W)

Lower Detection Limit: Less than 0.1 mg/mL (over 10X more

sensitivity than the FF sensor)
Flow Rate Limits: No flow rate limit

Min Fill Level: 1/8 volume

Wetted materials: 316SS, Teflon, Saphire

Materials exposed to C1D1 area: Delrin housing, 316 SS, Teflon,

Viton, Signal wire jacket

Stainless tube inner diameter: 0.5"

#### **Design Notes**

The sensor electronics are bathed in an inert nitrogen environment to further insulate them from any risk of exposure even though the sensor is intrinsically safe. Solvent does NOT

touch the electronics. The included 30' sensor cable and 10' power supply allows the digital display to be easily placed outside of the C1D1 area

#### **DISPLAY**

- Currently, it is essentially the same as standard FRACTION FINDER with different branding
- In the future, the EXTRACTION FINDER display will have its own extraction-specific software / UI



