



PRODUCT SPECIFICATIONS

FRACTION FINDER

SYSTEM

Creator: Arometrix, Inc.

Application(s): Distillation (short path; wiped film; thin film)

State of Materials: Distillates

Expected Life Span: 10+ years

Shipping Weight: 5 lbs

Shipping Dimensions: 10"x10"x8"

Technology Validation Reference: Peer-reviewed research article, "In Situ Fluorescence Spectroscopy for In-Line Distillation Process Monitoring"



SENSOR

Type: "Standard" or "ultra-sensitive"

Technology: In-situ fluorescence spectroscopy sensor (contains an optical light pulse and UV fluorescence detector)

Wavelength of excitation: 365 nm

Size(s): Size 29; Size 34

Interface Requirements:

- Size 29 Glass (28-30mm outer diameter)
- Size 34 Glass (31-34mm outer diameter)
- **Do not use with double-jacketed glass*

Cable Length: 2'-30'

Max Temp: 100 C

Min Temp: 5C

Optical Detection Range: 300 – 1000 nanometers

Lower Detection Limit: 1 mg/mL (at a volume of 1 cubic centimeter of oil)

Accuracy: Spectral Resolution is 15 nm max

Margin for Error: Not applicable to qualitative measurements

Reading Speed: > 1 second

Flow Rate Limits: No flow rate limit

Min Fill Level: 1/8 volume

Calibration: No



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 Supply: Yes

Mount: Mounts to a laboratory stand bracket (pole up to 1/2" thick)

Units: Wavelength Nanometers (nanometers); Wavelength Intensity Values (arbitrary units)

Plots: Spectrogram; Wavelength Intensity graph

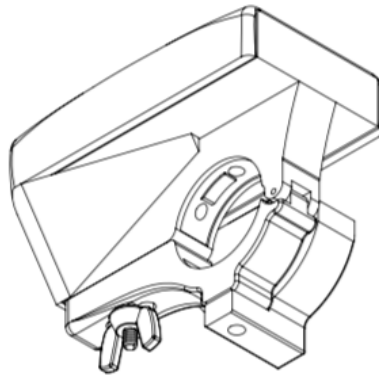
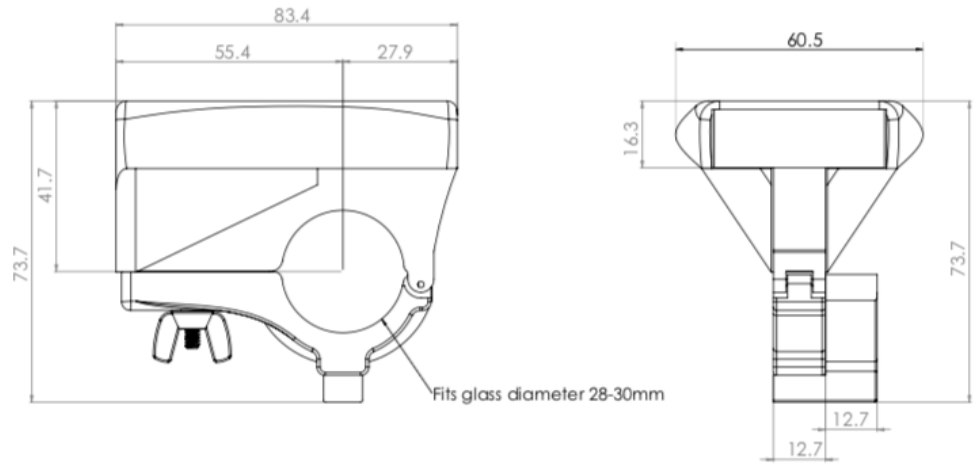
Metric Type: Qualitative

Telemetry Options: USB

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

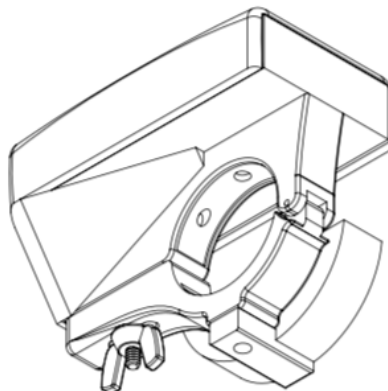
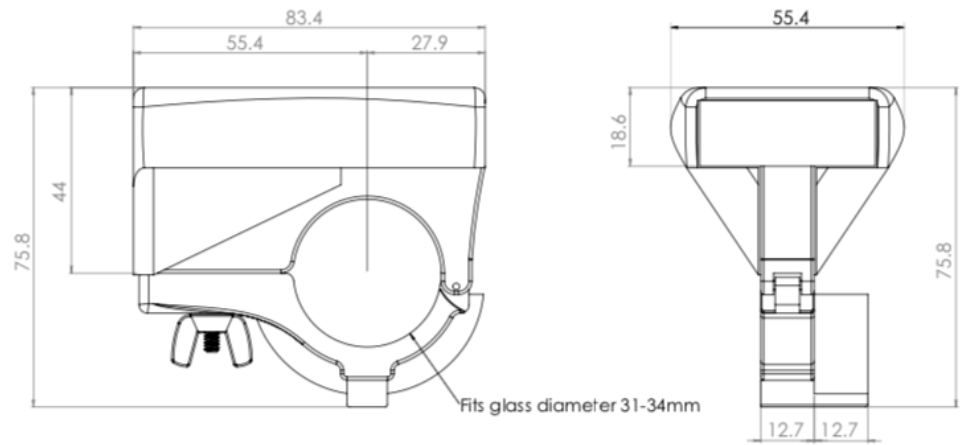


**SIZE 29
SENSOR
DIMENSIONS**



Fraction Finder Size 29 v2.0
All dimensions in millimeters

**SIZE 34
SENSOR
DIMENSIONS**



Fraction Finder Size 34 v1.0
All dimensions in millimeters



FRACTION FINDER ULTRA / EXTRACTION FINDER

SYSTEM

Creator: Arometrix, Inc.

Application(s): Distillation, Extraction, Chromatography, Conversion Reaction

State of Materials: Extracts, Distillates, Isolates

Expected Life Span: 10+ years

Shipping Weight: 10 lbs

Certifications: No (C1D2/C1D1 planned for by end of 2020)



SENSOR

Type: "Ultra-sensitive" only

Technology: In-situ fluorescence spectroscopy sensor (contains an optical light pulse and UV fluorescence detector)

Wavelength of excitation: 365 nm

Size(s): Size 34 only

Interface Requirements:

- Size 34 Glass (31-34mm outer diameter)
- AMP Sight Glass
- **Do not use with double-jacketed glass*

Cable Length: 2'-30'

Max Temperature: 100 C

Min Temperature: 5C

Optical Detection Range: 300 – 1000 nanometers

Lower Detection Limit: <1 mg/mL (at a volume of 1 cubic centimeter of oil)

Accuracy: Spectral resolution is 15 nm max

Margin for Error: Not applicable to qualitative measurements

Reading Speed: > 1 second

Flow Rate Limits: No flow rate limit

Min Fill Level: 1/8 volume

Calibration: No



SIGHT GLASS

Creator: AMP Equipment

FDA/USDA/ABS Certified Gaskets PTFE

Other Steel Parts: 304l

Tube: Borosilicate glass (pyrex)

Stainless parts: 304L

Surface Finish: <63u

Sanitary End Clamps: 1.5" (2" extender available)

Maximum Pressure: 30 Psi

Max Temperature: 350F

Min Temperature: -70C

Product Dimensions: 6.94in (length) x 4.98in (width)

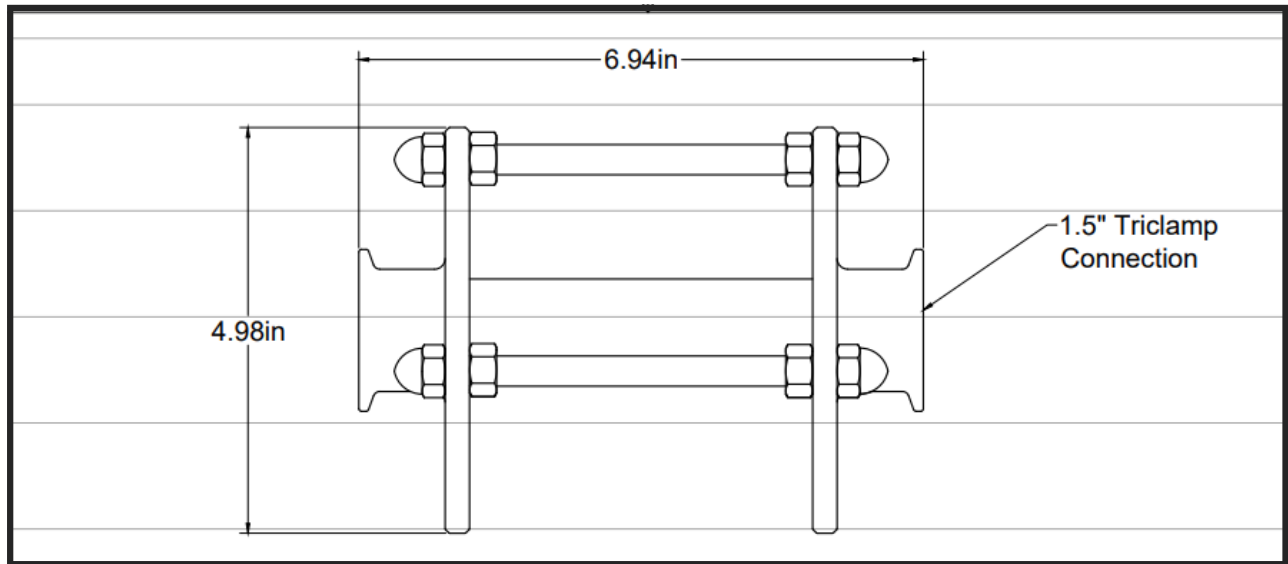
Shield: Polycarbonate (for cryogenic extraction environments)



DISPLAY

Same as standard FRACTION FINDER

AMP SIGHT GLASSES



SIGHT GLASS



SHIELDED SIGHT GLASS

