2.3 General Specifications

Sample size: Adjustable from 5 to 65 microliters (aspirated volume)

Response Time: Sample results in 60 seconds,

Complete sample-to-sample cycle in 90 seconds (May vary with analyte and sample matrix.)

t

Power requirement: 110-120 VAC³, 1A or 220-240 VAC, 0.5A

50-60 Hz

50 Watts nominal

Working environment:

Ambient temperature: 15° to 35° Celsius

Relative humidity: 10% to 90% (non-condensing)

Instrument dimensions: 10.0 x 14.0 x 14.0 inches

25.4 x 35.6 x 35.6 centimeters

Instrument weight: 25 pounds

11.4 kilograms

Regulatory Compliance: CSA, CE

Pollution degree 2 Installation Category 2

Altitude 2000m Indoor use only

e

 $^{^3}$ Mains supply voltage fluctuations not to exceed $\pm 10\%$ of nominal supply voltage.

2.4 Chemistry Performance Specifications

Dextrose (D-Glucose)

YSI Membrane: 2365

Detection Range: 0-9 g/L at 25 μL sample size,

0-25 g/L at 10 μ L sample size

Calibration Point:

Linearity Check Point:

Precision (CV,n=10):

Linearity (0 to Cal Point):

Linearity (Cal to Range Max):

Typical Membrane Working Life:

Membrane O-ring Color:

2.50 g/L

9.0 g/L

\$\delta = 2\%\$

\$\delta = 2\%\$

Linearity (21 to Range Max):

\$\delta = 21 \text{ days}

Red

Ethanol

YSI Membrane: 2786 Detection Range: 0-3.2 g/L Calibration Point: 2.00 g/L 3.20 g/L Linearity Check Point: Precision (CV,n=10): 2% Linearity (0 to Cal Point): ±2% Linearity (Cal to Range Max): ±5% Typical Membrane Working Life: 5 days Membrane O-ring Color: Green Potential Substrate Interference: Methanol

L-Glutamate*

YSI Membrane: 2754

Detection Range: 0-10 mmol/L
Calibration Point: 5.00 mmol/L
Linearity Check Point: 10.0 mmol/L

Precision (CV,n=10): 2%

Linearity (0 to Cal Point): ±2%

Linearity (Cal to Range Max): ±5%

Typical Membrane Working Life: 7 days

Membrane O-ring Color: Yellow

L-Lactate (L-Lactic Acid)

YSI Membrane: 2329 Detection Range: 0-2.67 g/L Calibration Point: 0.50 g/L Linearity Check Point: 2.67 g/L Precision (CV,n=10): 2% Linearity (0 to Cal Point): ±2% Linearity (Cal to Range Max): ±5% Typical Membrane Working Life: 14 days Membrane O-ring Color: Gray

^{*}User may configure instrument to measure as monosodium glutamate (MSG).

Lactose

YSI Membrane: 2702 Detection Range: 0-25 g/L Calibration Point: 5.00 g/L Linearity Check Point: 25.0 g/L Precision (CV,n=10): 2% Linearity (0 to Cal Point): ±2% Linearity (Cal to Range Max): ±5% Typical Membrane Working Life: 10 days Membrane O-ring Color: White

Sucrose

YSI Membrane: 2703 Detection Range: 0-25 g/L Calibration Point: 5.00 g/L Linearity Check Point: 25.0 g/L Precision (CV,n=10): 2% Linearity (0 to Cal Point): ±2% Linearity (Cal to Range Max): ±5% Typical Membrane Working Life: 10 days Membrane O-ring color: Blue

Choline

YSI Membrane: 2771 Detection Range: 0-450 mg/L Calibration Point: 175 mg/L Linearity Check Point: 450 mg/L Precision (CV,n=10): 2% ±2% Linearity (0 to Cal Point): Linearity (Cal to Range Max): ±5% Typical Membrane Working Life: 7 days Membrare O-ring color: Orange

L-Glutamine*

 YSI Membrane:
 2735

 Detection Range:
 0-8 mmol/L

 Calibration Point:
 5.00 mmol/L

 Linearity Check Point:
 8.00 mmol/L

 Precision (CV,n=5):
 4%

 Linearity (0 to Cal Point):
 ±4%

 Linearity (Col to Pance Mov):
 ±5%

Linearity (0 to Cal Point): ±4%

Linearity (Cal to Range Max): ±5%

Typical Membrane Working Life: 5 days

Membrane O-ring color: Magenta

^{*}Specs shown are for simultaneous measurement of glutamine and glutamate.

Methanol

 YSI Membrane:
 2725

 Detection Range:
 0-2.50 g/L

 Calibration Point:
 1.00 g/L

 Linearity Check Point:
 2.50 g/L

 Precision (CV,n=10):
 2%

Lineari y (0 to Cal Point): ±2% or 0.02 g/L, whichever is greater

Linearity (Cal to Range Max): ±5%
Typical Membrane Working Life: 5 days
Membrane O-ring color: Black
Potential Substrate Interference: Ethanol

NOTE: For the following chemistries YSI believes that you will be able to measure these analytes for many applications in the ranges specified below. However, YSI makes no claims with respect to precision or linearity. For each analyte below you will need to prepare the calibrator and linearity standards for your application.

YSI also recommends that you confirm that no significant levels of interfering substrates are present in your samples. For example, we know that lactose and galactose in the same sample may interfere if significant concentrations of both exist. Also dextrose will read at a sucrose membrane, however, by using the dual channel approach to dextrose and sucrose, this is automatically accounted for by the software.

Galactose

Membrane: 2702

Detection Range: 0-25 g/L

Typical Membrane Working Life: 10 days

Membrane O-ring Color: White

User Must Provide: Calibrator solution

Potential Substrate Interference: Lactose

Hydrogen Peroxide

Membrane: 2701
Det_ection Range: 0-600 mg/L
Typical Membrane Working Life: 21 days
Membrane O-ring Color: Yellow

User Must Provide: Calibrator solution

Catalase-free Supply Buffer