REFRACTiMASTER®

The new standard for
Refractive Index Detection
in HPLC

BIOTECH
FLUIDICS

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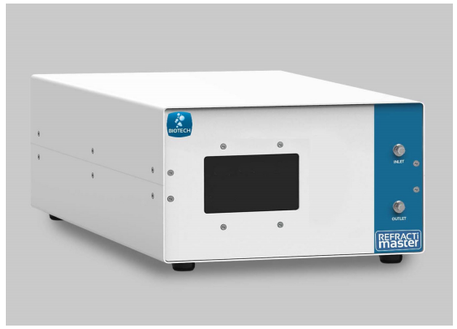
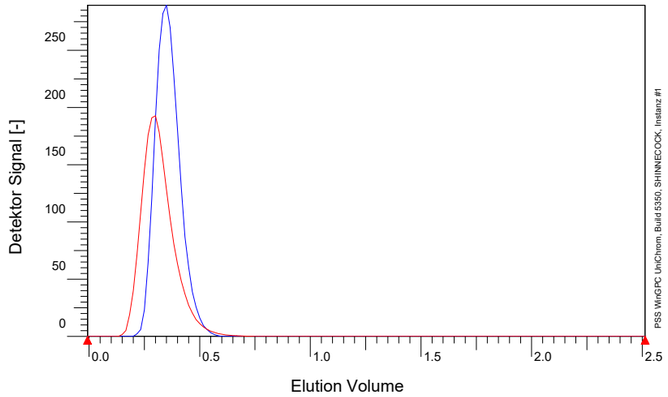
Absorption Independent Detection for Chromatography by Refractive Index Detection (DRI)

The new REFRACTiMASTER® DRI detector from Biotech Fluidics excels in every aspect. It is perfect for determination of compounds with no or low UV absorbance.

REFRACTiMASTER® provides reliable detection of simple sugars, complex carbohydrates, alcohols, fatty acids, and polymers or for any application when a generic detection method is preferable.

Detection of impurities regardless of chromophores or extinction factors is another field where refractive index detection provide extra quality.

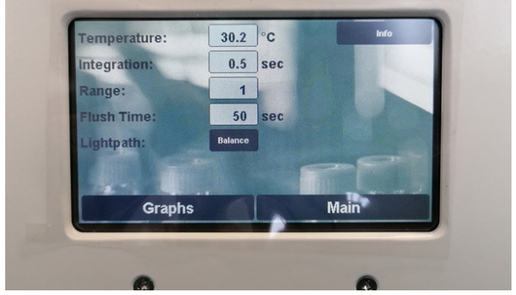




KCL 2mg/mL flow rate 1mL/min. Red line from reference detector and blue line from REFRACTiMASTER®

LOW NOISE AND WIDE LINEARITY BY GREAT FLUIDIC SOLUTIONS

The unique design of REFRACTiMASTER® not only provides safety features protecting the flow cell in the case of blockage but also improves the analytical performance against available alternatives. The 7,6uL flow cell and measurement cell have been designed to optimise performance. REFRACTiMASTER® out-performs benchmark reference units with a baseline noise of 7uV as compared to 14uV. This is also seen as a 20% better response than benchmark reference units.



EASY TO USE INTERFACE

REFRACTiMASTER® is fitted with a 4.3" touch panel and an intuitive interface to optimise the user experience. From the touch panel operational are easily set. This includes purging, integration time, measuring range and flush time. Measuring temperature setpoint is easily set in steps of 1°C from room temperature to 80°C to follow the column temperature.

WHY DRI?

UV detection is dependent on UV adsorption and MS on formation of ions while Refractive Index detection is possible for almost any molecule regardless of size or structure.

EXTENDED TEMPERATURE RANGE

REFRACTiMASTER® enables temperatures up to 80°C taking DRI into reduced pack pressure and enhanced resolution by the use of column ovens.

OVER PRESSURE SAFETY

REFRACTiMASTER® has a built-in function protecting the flow cell from destruction by accidental over-pressure. This unique feature may save not only your day but also your budget.

3 YEARS WARRANTY

At Biotech Fluidics we only operate with the best design and components. We trust our quality and offer an industry unique warranty of 3 years.

Delivered from stock

Flow range 0,1-10 mL/min

Flow cell overpressure protection

Compatible with any chromato-graphic system

TECHNICAL DATA

REFRACTiMASTER® is built to fill the demands of modern chromatograph systems.

OEM version may be provided on request. Please contact Biotech Fluidics for more details.

COMMUNICATION

Analog output ± 1V Full Range
Analog output ± 1V for currently selected Range
Analog Input ± 2.5 V
2 TTL Level Digital Outputs (Start, Error)
2 TTL Level Digital Inputs (Start, Error)
USB and LAN Connection

A complete delivery consists of: REFRACTiMASTER® HPLC-DRI with main cable, USB Cable, female plug (10 pole), operating tool, color coded flat cable (10 pole)

REFRACTiMASTER®

Part Number	AB-20101
Measurement Type	Deflection
Refractive Index Range	± 1.75 n
Full Range	512 µRIU
Measurement Ranges	500 µRIU, 250 µRIU, 125 µRIU, 62.5 µRIU
Noise Level	< 1.0x10E-9 RIU
Drift	< 0.001 µRIU / h
Flow Cell Volume	7.8 µL
Max. Pressure at Cell	0.7 MPa
Cell Protection	Automatic Cell Safety device in case of Overpressure
Temperature Range	Room to 80 °C in 1 °C steps
Temperature Accuracy	± 0.5 °C
Temperature Stability	> 0.01 °C
Flow Range	0.1 – 10.0 mL/min
Autozero Range	Full Operation range
Wetted Materials	316L, PTFE, PEEK, Quartz, PPS
Display	Full Color 4.3” TFT Display with Touch Panel
Power requirement	AC 90 – 270V, 50-60 Hz
Power Consumption	80 VA max
Dimensions	420x260x160 mm
Weight	8 kg

For ordering and technical support, please contact:
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