

## LR-D-M SERIES

### MULTIPLE REFLECTION DIAMOND ATR LIQUID FLOW CELLS

Models LR-D-M, LR-D-M-T

Durasens™ LR-D-M Multiple Reflection Diamond ATR Flow Through Liquid Cells are designed for monitoring streams of liquids. The number of reflections is 9 making the cell a good choice for analyzing liquids that are weak absorbers of infrared radiation. Due to high inertness of the diamond ATR element even the most corrosive process streams can be monitored. These cells are constructed of 316 stainless steel and have 1/8" diameter in/out tubing. Other cell body materials, such as Hastelloy, are also available. The cells can be used in any FTIR spectrometer.

The LR-D-M Series cells are available in a temperature controlled version (Model LR-D-M-T). A low-voltage temperature controller is available separately.



Model LR-D-M

#### PRODUCT HIGHLIGHTS

- Strong, chemically inert diamond ATR element
- 9 reflections provide high sensitivity
- Cell volume under 10 microliters
- Temperature controlled model available
- Maximum temperature up to 175°C
- Compatible Automatic Temperature Controller available
- Fits all standard FTIR spectrometers

#### SPECIFICATIONS

<b>Body Material</b>	316 Stainless Steel standard, other materials available
<b>Fittings</b>	1/8" Compression fittings standard, other fittings available
<b>ATR Material</b>	Diamond
<b>Number of Reflections</b>	Nine
<b>Wavelength Range</b>	From 5000 to 550 $\text{cm}^{-1}$
<b>Max Operating Temperature</b>	200°C with Viton O-rings, 260°C with Kalrez O-rings
<b>Max Operating Pressure</b>	Up to 1000 psi

#### Durasens, LLC

141 Tompkins Ave, PO Box 277, Pleasantville, NY 10570  
 T 914 747 7205 F 914-747-7209 E info@durasens.com  
[www.durasens.com](http://www.durasens.com)

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#### ORDERING INFORMATION

MODEL	DESCRIPTION
LR-D-M	Multiple Reflection Diamond ATR Liquid Flow Through Cell
LR-D-M-T	Temperature Controlled Multiple Reflection Diamond ATR Liquid Flow Through Cell
ATC-024-1	Automatic Temperature Controller (110V Input, 24V Output)
ATC-024-2	Low-voltage Automatic Temperature Controller (220V/240V Input, 24V Output)

#### O-RINGS

##### MATERIAL SET OF 2

Viton	ORV - 023
Kalrez	ORK - 023