

Contact / Ordering Information

How to Reach New Era

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International

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Remittance and Correspondence

New Era Enterprises, Inc.
PO Box 747
Vineland, NJ 08362-0747 USA

Ordering

Place orders directly with New Era.

To ensure the best service, when ordering be sure to include the following information:

- shipping and invoicing addresses
- purchase order number
- complete catalog numbers and quantity
- a brief description of each item

Payment

US Payments are accepted by check or by credit card.

International Payments, in US Dollars only, are accepted by credit card or by prepayment with a check drawn on a US bank or electronic transfer.

We accept Visa, MasterCard and American Express.

Prices

All prices are in US Dollars and are subject to change without notice. If you have any questions, contact New Era for updates.

For international requests, a Pro Forma Invoice, showing all costs along with delivery time and payment terms, will be prepared for your review. No actions will be taken until a purchase order is received from you.

Minimum Order / Terms / FOB

Minimum Order: \$50 USA, \$100 outside USA.
Terms: Net 30 Days
FOB: Vineland, NJ USA

Delivery

Items are shipped promptly via UPS, FedEx or Air Parcel Post as you indicate when ordering. In the event of backorders, a partial shipment would be made at your request.

Returns

Before a return is made, contact New Era to discuss the nature of the return. The original purchase order number, the catalog number and quantity of the item(s) in question are needed to resolve the matter quickly.

Warranty

New Era Enterprises, Inc. warrants that the products listed in this catalog meet the descriptions and/or specifications so given. No other expressed or implied warranty is given. This supersedes all other warranties, representations and guarantees.

Trademarks used in this catalog

Teflon - E.I. DuPont
Pyrex - Corning Glass Works

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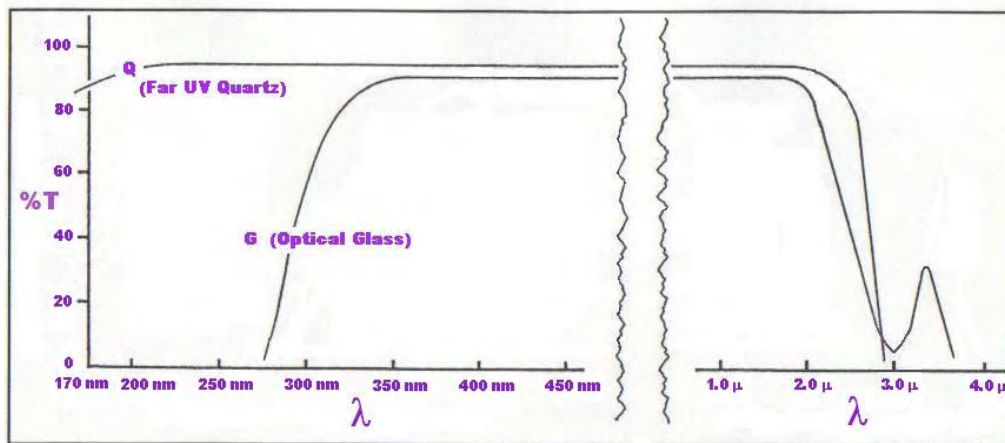
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Properties of Cells

All New Era cells are thermally-fused completely with no adhesives used. *The optical windows are extremely parallel and flat* with a fine optical polish. By careful annealing, cell physical strength is maximized to permit safe exposure to slightly higher and lower temperatures,

and to pressure differentials of up to 3 atmospheres. *The cell materials are chemically resistant* to most solvents, acids and bases. Acids, such as HF, and strong bases (pH ≥9) should not come into contact with the cells.

Transmission of Cell Materials



Material	Transmission Range	Matching Tolerance	Pathlength Range	Pathlength Tolerance
Optical Glass (G)	340 nm - 2.3 μ	0.5% @ 350 nm	<10 mm 10 mm - 20 mm 50 mm - 100 mm	± 0.02 mm ± 0.1 mm ± 0.2 mm
Far UV Quartz (Q)	170 nm - 2.7 μ	1.5% @ 200 nm	≤0.05 mm 0.1 mm - <0.5 mm 0.5 mm - 20 mm 50 mm - 100 mm	± 0.002 mm ± 0.005 mm ± 0.01 mm ± 0.02 mm

Cell Dimensions

- External Height** .. excludes lids, stoppers, screw cap necks, tubes and valves unless specified.
- Pathlength** distance between inside window surfaces parallel to the incident beam.
- External Length** .. distance between outside window surfaces parallel to the incident beam or pathlength.
- Internal Width** distance between inside window surfaces perpendicular to the incident beam or pathlength.
- External Width** distance between outside window surfaces perpendicular to the incident beam or pathlength.
- Base Thickness** .. distance between sample chamber bottom and cell base.
- Z-Dimension** distance between cell base and vertical center of sample chamber.
- Cell Volumes** the listed volumes are ~85% of sample chamber volume (excluding tubes and necks) unless otherwise stated or dead volume is significant.
- Matching** difference in measured %Transmission of cells. Match code numbers are assigned to cells when %T values vary outside the established tolerance. Equal match code numbers, or no match code numbers, indicate the cells are within the established tolerance. Because of window surface degradation, a used cell may not necessarily match a new cell with the same code number. When two or more cells are ordered, they are supplied as matched at no extra charge.

Rectangular Cell with Teflon Lid / Stopper

Two opposite windows polished
External Width - 12.5mm
Internal Width - 10mm



Space Compensators

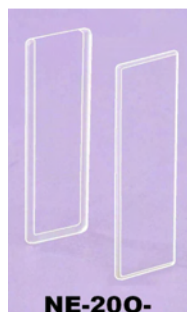
For properly positioning 1, 2 and 5mm pathlength cells in a 10mm pathlength sample cavity.

Cat. No.	For Cell Path
77000-1	1mm
77000-2	2mm
77000-3	5mm

Price / each \$54.00

Pathlength (mm)	1	2	5	10	1	2	5	10
Approx. Volume (ml)	0.4	0.7	1.7	3.5	0.4	0.7	1.7	3.5
External Height (mm)	45	45	45	45	55	55	48	48
External Length (mm)	3.5	4.5	7.5	12.5	3.5	4.5	7.5	12.5
G (Optical Glass)								
Cat. No.	NE-1-G-1	NE-1-G-2	NE-1-G-5	NE-1-G-10	NE-21-G-1	NE-21-G-2	NE-21-G-5	NE-21-G-10
Price / each (1-7)	\$38.00	\$39.00	\$34.00	\$29.00	\$85.00	\$85.00	\$85.00	\$55.00
(8 and over)	36.00	-	-	27.00	80.00	-	-	51.00
Q (Far UV Quartz)								
Cat. No.	NE-1-Q-1	NE-1-Q-2	NE-1-Q-5	NE-1-Q-10	NE-21-Q-1	NE-21-Q-2	NE-21-Q-5	NE-21-Q-10
Price / each (1-7)	\$83.00	\$83.00	\$76.00	\$73.00	\$139.00	\$139.00	\$139.00	\$103.00
(8 and over)	77.00	77.00	72.00	68.00	131.00	131.00	131.00	97.00

Demountable Rectangular Cells



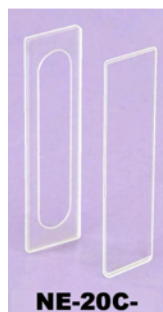
Two opposite windows polished
External Height - 45mm
External Width - 12.5mm

(NE-200-) **One End Open**

Internal Width - 10mm
Internal Sample Height - 40mm

(NE-20C-) **Both Ends Closed**

Internal Width - 8mm
Internal Sample Height - 38mm



Cell Holder

For clamping and properly positioning NE-200- and NE-20C- cells in a 10mm pathlength sample cavity.

External dimensions are 12.5mm x 12.5mm x 52mm. Base thickness is 9mm.

Cat. No.	Description	Price / each
77001	Cell Holder	\$76.00

Cells will form the best seal with aqueous and higher viscosity type samples and solvents.

Pathlength (mm)	0.01	0.1	0.2	0.5	1.0
Approx. Volume	4 μ l	40 μ l	80 μ l	0.2 ml	0.4 ml
External Length (mm)	2.5	2.6	2.7	3.0	3.5
Q (Far UV Quartz)					
Cat. No.	NE-200-Q-0.01	NE-200-Q-0.1	NE-200-Q-0.2	NE-200-Q-0.5	NE-200-Q-1.0
Price / each	\$285.00	\$152.00	\$152.00	\$152.00	\$152.00

Pathlength (mm)	0.01	0.1	0.2	0.5	1.0
Approx. Volume	3 μ l	30 μ l	60 μ l	0.15 ml	0.3 ml
External Length (mm)	2.5	2.6	2.7	3.0	3.5
Q (Far UV Quartz)					
Cat. No.	NE-20C-Q-0.01	NE-20C-Q-0.1	NE-20C-Q-0.2	NE-20C-Q-0.5	NE-20C-Q-1.0
Price / each	\$285.00	\$152.00	\$152.00	\$152.00	\$152.00

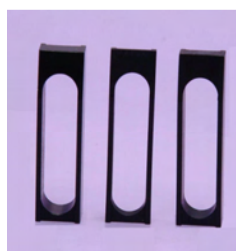
Rectangular Cell with Screw Cap

For samples where a controlled atmosphere is required. Volatile, hazardous and unstable type samples (such as air-sensitive) are ideally accommodated by these cells.

Use of a smaller screw neck on these cells eliminates the bulky/heavy top, found with other cells on the market.

Two opposite windows polished
 External Height - \approx 55mm
 External Height (Cell) - 40mm
 External Width - 12.5mm
 Internal Width - 10mm

A solid Teflon lined cap or an open-top cap with a Teflon/Silicone septum (for needle injection/withdrawal) is included with each cell.



Space Compensators

For properly positioning 1, 2 and 5mm pathlength cells in a 10mm pathlength sample cavity.

Cat. No.	For Cell Path
77000-1	1mm
77000-2	2mm
77000-3	5mm

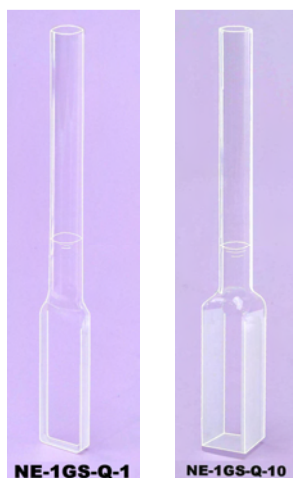
Price / each \$54.00

Extra Caps and Septums

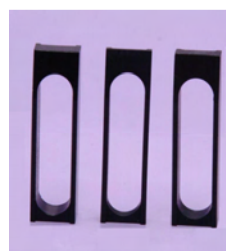
Cat. No.	Description	Price / Pk/12
3108T	Solid Cap (Teflon lined)	\$11.70
3008	Open-Top Cap	7.50
3208	Teflon/Silicone Septum	8.10

Pathlength (mm)	1	2	5	10
Approx. Volume (ml)	0.4	0.7	1.7	3.5
External Length (mm)	3.5	4.5	7.5	12.5
Q (Far UV Quartz)				
Cat. No. - Solid Cap	NE-1SC-Q-1	NE-1SC-Q-2	NE-1SC-Q-5	NE-1SC-Q-10
Cat. No. - Open-Top Cap	NE-1OC-Q-1	NE-1OC-Q-2	NE-1OC-Q-5	NE-1OC-Q-10
Price / each (1-7)	\$195.00	\$195.00	\$180.00	\$160.00
(8 and over)	185.00	185.00	170.00	150.00

Rectangular Cell with Graded Seal (Quartz-to-Pyrex)



Two opposite windows polished
 External Height of Cell - 40mm
 Tube Length - 70mm
 Tube OD - 8mm
 Tube ID - 6mm
 External Width - 12.5mm
 Internal Width - 10mm



Space Compensators

For properly positioning 1, 2 and 5mm pathlength cells in a 10mm pathlength sample cavity.

Cat. No.	For Cell Path
77000-1	1mm
77000-2	2mm
77000-3	5mm

Price / each \$54.00

Pathlength (mm)	1	2	5	10
Approx. Volume (ml)	0.4	0.7	1.7	3.5
External Length (mm)	3.5	4.5	7.5	12.5
Q (Far UV Quartz)				
Cat. No.	NE-1GS-Q-1	NE-1GS-Q-2	NE-1GS-Q-5	NE-1GS-Q-10
Price / each (1-7)	\$198.00	\$198.00	\$188.00	\$178.00
(8 and over)	-	-	-	168.00

Flat Rectangular Flow Cell



Two opposite windows polished
 External Height - 45mm
 Sample Chamber Height - 40mm
 External Width - 12.5mm
 Internal Width - 8mm
 Length of Tubes - 16mm
 OD of Tubes - 4.2mm
 ID of Tubes - 2.0mm

The spectrometer sample cavity should have a minimum pathlength of 40mm in order to permit tubular connections.

These cells are not useable in sample compartments with a "Z" Dimension = 8.5mm (see Page 5).



Cell Holder

For clamping and properly positioning NE-48-cells in the sample cavity. External dimensions are 12.5mm x 52mm. Base thickness is 9mm.

Cat. No.	Description	Price / each
77001	Cell Holder	\$76.00

Pathlength (mm)	0.1	0.2	0.5	1	2	5
Approx. Volume	30 μ l	60 μ l	0.15 ml	0.3 ml	0.6 ml	1.5 ml
External Length (mm)	2.6	2.7	3.0	3.5	4.5	7.5
Q (Far UV Quartz)						
Cat. No.	NE-48-Q-0.1	NE-48-Q-0.2	NE-48-Q-0.5	NE-48-Q-1	NE-48-Q-2	NE-48-Q-5
Price / each	\$269.00	\$269.00	\$269.00	\$259.00	\$259.00	\$259.00



Rectangular Cell with Valve (Quartz-to-Pyrex)

Constructed of Pyrex, the valve is a Teflon-Glass system with Viton O-Rings for seals, making it inert and ideal for attaching to laboratory glass systems. Cells can withstand pressures of 2-3 atmospheres and evacuation of 10^{-7} Torr.

Two opposite windows polished
 External Height of Cell - 40mm Internal Width - 10mm
 Overall Height - \approx 155mm External Width - 12.5mm
 Height of Side Arm - \approx 105mm Side Arm ID - 6mm
 Length of Side Arm - 50mm Side Arm OD - 8mm
 Valve Bore - 0 to 3mm



Space Compensators

For properly positioning 1, 2 and 5mm pathlength cells in a 10mm pathlength sample cavity.

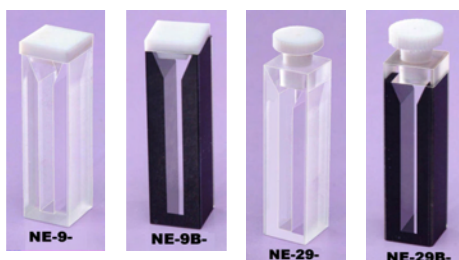
Cat. No.	For Cell Path
77000-1	1mm
77000-2	2mm
77000-3	5mm

Price / each \$54.00

Pathlength (mm)	1	2	5	10
Approx. Volume (ml)	0.4	0.7	1.7	3.5
External Length (mm)	3.5	4.5	7.5	12.5
Q (Far UV Quartz)				
Cat. No.	NE-1V-Q-1	NE-1V-Q-2	NE-1V-Q-5	NE-1V-Q-10
Price / each	\$370.00	\$370.00	\$350.00	\$340.00

Semi-Micro Cell with Teflon Lid / Stopper

Two opposite windows polished
 External Width - 12.5mm
 External Length - 12.5mm
 Pathlength - 10mm
 Base Thickness - 2.5mm



Micro Cell with Teflon Lid / Stopper



Internal Width (mm)	4	4	4	4	2	2	2	2
External Height (mm)	45	45	48	48	45	45	48	48
Approx. Volume (ml)	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7
G (Optical Glass)								
Cat. No.	NE-9-G-10	NE-9B-G-10	NE-29-G-10	NE-29B-G-10	NE-18-G-10	NE-18B-G-10	NE-28-G-10	NE-28B-G-10
Price / each	\$44.00	\$96.00	\$103.00	\$139.00	\$67.00	\$102.00	\$140.00	\$167.00
Q (Far UV Quartz)								
Cat. No.	NE-9-Q-10	NE-9B-Q-10	NE-29-Q-10	NE-29B-Q-10	NE-18-Q-10	NE-18B-Q-10	NE-28-Q-10	NE-28B-Q-10
Price / each	\$110.00	\$217.00	\$145.00	\$242.00	\$113.00	\$230.00	\$165.00	\$255.00

Semi-Micro Cell with Teflon Lid / Stopper

(Reduced Volumes)

Two opposite windows polished
 External Width - 12.5mm
 External Length - 12.5mm
 Pathlength - 10mm
 Base Thickness - 9mm



Micro Cell with Teflon Lid / Stopper



Internal Width (mm)	4	4	4	4	2	2	2	2
External Height (mm)	45	45	48	48	45	45	48	48
Approx. Volume (ml)	0.95	0.95	0.95	0.95	0.48	0.48	0.48	0.48
G (Optical Glass)								
Cat. No.	NE-9/9-G-10	NE-9B/9-G-10	NE-29/9-G-10	NE-29B/9-G-10	NE-18/9-G-10	NE-18B/9-G-10	NE-28/9-G-10	NE-28B/9-G-10
Price / each	\$93.00	\$108.00	\$178.00	\$202.00	\$104.00	\$131.00	\$184.00	\$217.00
Q (Far UV Quartz)								
Cat. No.	NE-9/9-Q-10	NE-9B/9-Q-10	NE-29/9-Q-10	NE-29B/9-Q-10	NE-18/9-Q-10	NE-18B/9-Q-10	NE-28/9-Q-10	NE-28B/9-Q-10
Price / each	\$155.00	\$257.00	\$217.00	\$265.00	\$177.00	\$260.00	\$197.00	\$272.00

Note: "Reduced Volume" Cells are not useable in sample compartments with a "Z" Dimension=8.5mm (see top section of Page 5).

Sub-Micro Cell with Teflon Lid / Stopper

For investigations where small quantities only are available (e.g. DNA / RNA and proteins).

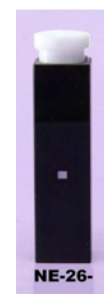
No special cell holders or adapters are necessary.

A pipet or syringe is used to fill or empty the sample chamber. For aqueous samples, ≈15% additional sample volume is needed to establish the correct meniscus level.



Two opposite windows polished
 External Height - 45mm
 External Width - 12.5mm
 External Length - 12.5mm
 Pathlength - 10mm

Z-Dimension - Distance between cell base and vertical center of sample chamber.



Z-Dimension	Instrument Models
8.5mm	Beckman, BioRad, Hitachi, Spectronic, Turner
15mm	Perkin-Elmer, Hewlett-Packard, Agilent, GBC, Shimadzu, Pharmacia, Jasco
20mm	Varian Cary

The **NE-16-** Cells are exactly equivalent to the Perkin-Elmer and Varian Cary cells, and include a **"liquid-tight" Polyethylene Lid** in addition to the Teflon Lid.

The **NE-26-** Cells are exactly equivalent to the Varian Cary cells and include an elongated **"liquid-tight" Teflon Stopper** to compensate for the dead volume space above the sample chamber.

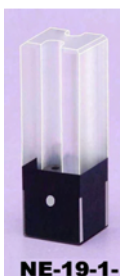
Approx. Volume (μl)	160	100	50	40	10
Sample Chamber Height (mm)	8	5	2.5	2	1
Sample Chamber Width (mm)	2	2	2	2	1
Q (Far UV Quartz)					
Cat. No. (Z = 8.5mm)	NE-16-1-Q-10-A	NE-16-2-Q-10-A	NE-16-3-Q-10-A	NE-16-4-Q-10-A	NE-16-5-Q-10-A
Cat. No. (Z = 15mm)	NE-16-1-Q-10-B	NE-16-2-Q-10-B	NE-16-3-Q-10-B	NE-16-4-Q-10-B	NE-16-5-Q-10-B
Cat. No. (Z = 20mm)	NE-16-1-Q-10-C	NE-16-2-Q-10-C	NE-16-3-Q-10-C	NE-16-4-Q-10-C	NE-16-5-Q-10-C
Price / each	\$265.00	\$265.00	\$265.00	\$265.00	\$276.00
Q (Far UV Quartz)					
Cat. No. (Z = 8.5mm)	NE-26-1-Q-10-A	NE-26-2-Q-10-A	NE-26-3-Q-10-A	NE-26-4-Q-10-A	NE-26-5-Q-10-A
Cat. No. (Z = 15mm)	NE-26-1-Q-10-B	NE-26-2-Q-10-B	NE-26-3-Q-10-B	NE-26-4-Q-10-B	NE-26-5-Q-10-B
Cat. No. (Z = 20mm)	NE-26-1-Q-10-C	NE-26-2-Q-10-C	NE-26-3-Q-10-C	NE-26-4-Q-10-C	NE-26-5-Q-10-C
Price / each	\$435.00	\$435.00	\$435.00	\$435.00	\$500.00

Sub-Micro Cell (Cylindrical / Small Pathlength Sample Chamber)

For investigations where small quantities only are available (e.g. DNA / RNA and proteins).

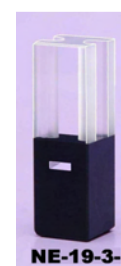
No special cell holders or adapters are necessary.

A pipet or syringe is used to fill or empty the sample chamber.



Two opposite windows polished
 External Width - 12.5mm
 External Length - 12.5mm
 External Height - 40mm (Z=8.5mm)
 External Height - 40mm (Z=15mm)
 External Height - 45mm (Z=20mm)

Z-Dimension - Distance between cell base and vertical center of sample chamber.



Z-Dimension	Instrument Models
8.5mm	Beckman, BioRad, Hitachi, Spectronic, Turner
15mm	Perkin-Elmer, Hewlett-Packard, Agilent, GBC, Shimadzu, Pharmacia, Jasco
20mm	Varian Cary

The **NE-19-1-Q-10-** Cells are exactly equivalent to cells offered by Perkin-Elmer and Varian Cary.

The **NE-19-3-Q-1-** Cells are exactly equivalent to cells offered by Perkin-Elmer.

Pathlength (mm)	10
Sample Chamber Volume (μl)	5
Fill Volume (μl)	10
Sample Chamber Dia. (mm)	0.8
Q (Far UV Quartz)	
Cat. No. (Z = 8.5mm)	NE-19-1-Q-10-A
Cat. No. (Z = 15mm)	NE-19-1-Q-10-B
Cat. No. (Z = 20mm)	NE-19-1-Q-10-C
Price / each	\$485.00

Pathlength (mm)	1
Sample Chamber Volume (μl)	5
Fill Volume (μl)	10
Sample Chamber Height (mm)	1
Sample Chamber Width (mm)	5
Q (Far UV Quartz)	
Cat. No. (Z = 8.5mm)	NE-19-3-Q-1-A
Cat. No. (Z = 15mm)	NE-19-3-Q-1-B
Price / each	\$525.00

Cylindrical Cell with Teflon Stopper

End windows polished
External Height - 32mm
External Diameter - 22mm
Internal Diameter - 19mm



Pathlength (mm)	10	20
Approx. Volume (ml)	2.8	5.6
External Length (mm)	12.5	22.5
G (Optical Glass)		
Cat. No.	NE-32-G-10	NE-32-G-20
Price / each	\$59.00	\$63.00
Q (Far UV Quartz)		
Cat. No.	NE-32-Q-10	NE-32-Q-20
Price / each	\$110.00	\$120.00

Cylindrical Cell with Two Teflon Stoppers

End windows polished
External Height - 32mm
External Diameter - 22mm
Internal Diameter - 19mm



Pathlength (mm)	50	100
Approx. Volume (ml)	14.1	28.2
External Length (mm)	52.5	102.5
G (Optical Glass)		
Cat. No.	NE-34-G-50	NE-34-G-100
Price / each	\$84.00	\$99.00
Q (Far UV Quartz)		
Cat. No.	NE-34-Q-50	NE-34-Q-100
Price / each	\$160.00	\$170.00

Cylindrical Cell with Pyrex Tube



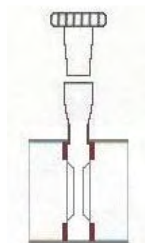
End windows polished
External Diameter - 22mm
Internal Diameter - 19mm

Tube Length - 70mm
Tube OD - 4mm
Tube ID - 2mm

Pathlength (mm)	1	2	5	10
Approx. Volume (ml)	0.3	0.6	1.4	2.8
External Length (mm)	3.5	4.5	7.5	12.5
G (Optical Glass)				
Cat. No.	NE-37-G-1	NE-37-G-2	NE-37-G-5	NE-37-G-10
Price / each	\$106.00	\$106.00	\$106.00	\$106.00
Q (Far UV Quartz) (Quartz-to-Pyrex Graded Seal)				
Cat. No.	NE-37-Q-1	NE-37-Q-2	NE-37-Q-5	NE-37-Q-10
Price / each	\$228.00	\$228.00	\$228.00	\$228.00

Micro Cylindrical Cell with Teflon Stoppers

Two round windows polished
External Height - 37mm
External Diameter - 22mm
Internal Diameter - 13mm
External Length - 22.5mm



Compatible with Varian Cary 1, 3, 4, 5, 50,
100, 300, 400, 500, 4000, 5000, 6000i.

Pathlength (mm)	0.1	0.2	0.5	1.0	2.0	5.0
Approx. Volume (ml)	0.17	0.19	0.28	0.42	0.70	1.6
Q (Far UV Quartz)						
Cat. No.	NE-31B-Q-0.1	NE-31B-Q-0.2	NE-31B-Q-0.5	NE-31B-Q-1.0	NE-31B-Q-2.0	NE-31B-Q-5.0
Price / each	\$320.00	\$320.00	\$320.00	\$320.00	\$287.00	\$277.00

Square / Semi-Micro / Micro Fluorometer Cell with Teflon Lid / Stopper

Raman IR Spectroscopy

Being fluorescence-free, the cells listed on this page are ideal for Raman IR applications where square cells are required.



Four windows and
..... base polished
External Width - 12.5mm
Pathlength - 10mm
External Length - 12.5mm

NE-9F-, NE-29F-
NE-18F-, NE-28F-
Base Thickness - 2.5mm



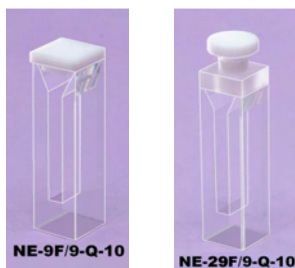
Internal Width (mm)	10	10
External Height (mm)	45	48
Approx. Volume (ml)	3.5	3.5
G (Optical Glass)		
Cat. No.	NE-3-G-10	NE-23-G-10
Price / each (1-7)	\$50.00	\$71.00
(8 and over)	47.00	67.00
Q (Far UV Quartz)		
Cat. No.	NE-3-Q-10	NE-23-Q-10
Price / each (1-7)	\$138.00	\$157.00
(8 and over)	131.00	150.00

4	4	2	2
45	48	45	48
1.4	1.4	0.7	0.7
G (Optical Glass)			
NE-9F-G-10	NE-29F-G-10	NE-18F-G-10	NE-28F-G-10
\$122.00	\$155.00	\$133.00	\$174.00
-	-	-	-
Q (Far UV Quartz)			
NE-9F-Q-10	NE-29F-Q-10	NE-18F-Q-10	NE-28F-Q-10
\$246.00	\$277.00	\$281.00	\$307.00
-	-	-	-

Semi-Micro / Micro Fluorometer Cell with Teflon Lid / Stopper (Reduced Volumes)

Raman IR Spectroscopy

Being fluorescence-free, the cells listed on this page are ideal for Raman IR applications where square cells are required.



Four windows and base polished
External Width - 12.5mm
Pathlength - 10mm
External Length - 12.5mm
Base Thickness - 9mm

Note: "Reduced Volume" Cells
are not useable in sample
compartments with a
"Z" Dimension=8.5mm
(see top section of Page 5).



Internal Width (mm)	4	4
External Height (mm)	45	48
Approx. Volume (ml)	0.95	0.95
Q (Far UV Quartz)		
Cat. No.	NE-9F/9-Q-10	NE-29F/9-Q-10
Price / each	\$322.00	\$339.00

2	2
45	48
0.48	0.48
Q (Far UV Quartz)	
NE-18F/9-Q-10	NE-28F/9-Q-10
\$365.00	\$390.00

Square Fluorometer Cell with Graded Seal (Quartz-to-Pyrex)



Four windows and base polished
External Height of Cell - 40mm
Tube Length - 70mm
Tube OD - 8mm
Tube ID - 6mm
External Width - 12.5mm
External Length - 12.5mm
Pathlength - 10mm

Internal Width (mm)	10
Approx. Volume (ml)	3.5
Q (Far UV Quartz)	
Cat. No.	NE-3GS-Q-10
Price / each (1-7)	\$230.00
(8 and over)	220.00



Square Fluorometer Cell with Screw Cap

For samples where a controlled atmosphere is required. Volatile, hazardous and unstable type samples (such as air-sensitive) are ideally accommodated by these cells.

Two opposite windows polished
External Height - ≈ 55mm
External Width - 12.5mm
External Length - 12.5mm
External Height (Cell) - 40mm
Pathlength - 10mm

Extra Caps and Septums

Cat. No.	Description	Price / Pk/12
3108T	Solid Cap (Teflon lined)	\$11.70
3008	Open-Top Cap	7.50
3208	Teflon/Silicone Septum	8.10

A solid Teflon lined cap or an open-top cap with Teflon/Silicone septum (for needle injection/withdrawal) is included with each cell.

Use of a smaller screw neck on this cell eliminates the bulky heavy top, found with other cells on the market.

Internal Width (mm)	10
Approx. Volume (ml)	3.5
Q (Far UV Quartz)	
Cat. No. - Solid Cap	NE-3SC-Q-10
Cat. No. - Open-Top Cap	NE-3OC-Q-10
Price / each (1-7)	\$215.00
(8 and over)	205.00



Rectangular Fluorometer Cell with Valve (Quartz-to-Pyrex)

Constructed of Pyrex, the valve is a Teflon-Glass system with Viton O-Rings for seals, making it inert and ideal for attaching to laboratory glass systems. Cells can withstand pressures of 2-3 atmospheres and evacuation of 10^{-7} Torr.

Four windows and base polished
 External Height of Cell - 40mm
 Overall Height - \approx 155mm
 Height of Side Arm - \approx 105mm
 Length of Side Arm - 50mm

Valve Bore - 0 to 3mm
 Internal Width - 10mm
 External Width - 12.5mm
 Side Arm ID - 6mm
 Side Arm OD - 8mm

Pathlength (mm)	10
Approx. Volume (ml)	3.5
External Length (mm)	12.5
Q (Far UV Quartz)	
Cat. No.	NE-3V-Q-10
Price / each	\$390.00

NE-3V-Q-10

Cryogenic Fluorometer Cell with Teflon Lid

Extra strength rounded corners on the cell allow for use from \sim -210°C to \sim 200°C.

Caution must be taken to prevent thermal shock.

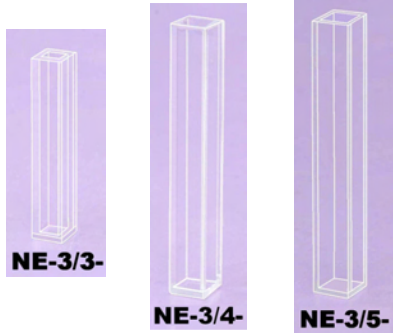
Four windows and base polished
 External Height - 45mm
 External Width - 12.5mm
 Internal Width - 10mm
 External Length - 12.5mm



NE-3C-Q-10

Pathlength (mm)	10
Approx. Volume (ml)	3.5
Q (Far UV Quartz)	
Cat. No.	NE-3C-Q-10
Price / each	\$255.00

Square Micro Fluorometer Cell with Open-Top / Teflon Stopper



Four Windows and base polished

Cell Holders are available and **ordered separately** to properly position these cells in a 10mm pathlength sample compartment cavity. See **below**.



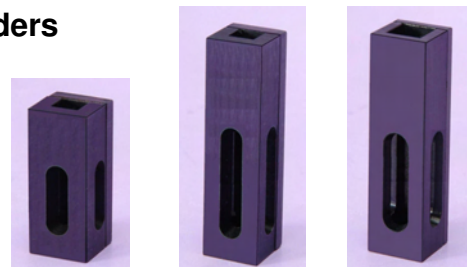
Pathlength (mm)	3	3	4	5
Approx. Volume (ml)	0.2	0.3	0.5	0.8
External Height (mm)	30	45	45	45
External Width (mm)	5.5	5.5	6.5	7.5
Internal Width (mm)	3	3	4	5
External Length (mm)	5.5	5.5	6.5	7.5
G (Optical Glass)				
Cat. No.	NE-3/3-G-3-30	NE-3/3-G-3	NE-3/4-G-4	NE-3/5-G-5
Price / each	\$99.00	\$99.00	\$99.00	\$99.00
Q (Far UV Quartz)				
Cat. No.	NE-3/3-Q-3-30	NE-3/3-Q-3	NE-3/4-Q-4	NE-3/5-Q-5
Price / each	\$192.00	\$192.00	\$192.00	\$192.00

3	4	5
0.3	0.5	0.8
45	45	45
5.5	6.5	7.5
3	4	5
5.5	6.5	7.5
G (Optical Glass)		
NE-23/3-G-3	NE-23/4-G-4	NE-23/5-G-5
\$128.00	\$128.00	\$128.00
Q (Far UV Quartz)		
NE-23/3-Q-3	NE-23/4-Q-4	NE-23/5-Q-5
\$240.00	\$240.00	\$240.00

Square Micro Cell Holders

For correctly positioning small external length/width micro cells with the excitation and emission beams in a 10mm pathlength sample cavity. Constructed of black anodized aluminum to eliminate stray light effects.

Three apertures
 External Width - 12.5mm
 External Length - 12.5mm
 Distance between holder base...
 ...and aperture bottom - 5.5mm



External Height (mm)	30	45	45	45
Aperture Width (mm)	2.5	2.5	3.5	4.5
Aperture Height (mm)	11	21	21	21
For Cell Cat. Nos.	NE-3/3-G(Q)-3-30	NE-3/3-G(Q)-3, NE-23/3-	NE-3/4-, NE-23/4-	NE-3/5-, NE-23/5-
Cat. No.	77002-1	77002-2	77002-3	77002-4
Price / each	\$119.00	\$119.00	\$119.00	\$119.00

Sub-Micro Fluorometer Cell with Teflon Lid / Stopper

For investigations where small quantities only are available (e.g. DNA / RNA and proteins).

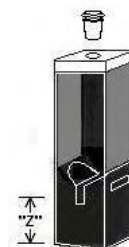
No special cell holders or adapters are necessary.

A pipet or syringe is used to fill or empty the sample chamber. For aqueous samples, ≈15% additional sample volume is needed to establish the correct meniscus level.



Two opposite windows and emission window polished
 External Width - 12.5mm
 External Length - 12.5mm
 Pathlength - 10mm
 External Height - 45mm (NE-16F-)
 External Height - 48mm (NE-26F-)

Z-Dimension - Distance between cell base and vertical center of sample chamber.



Z-Dimension	Instrument Models
8.5mm	Beckman
15mm	Perkin-Elmer, Shimadzu, Molecular Devices (SpectraMax), SLM (Aminco) Spectronic, Spex (Jobin-Yvon), Jasco, PTI (Photon Technology)
20mm	Varian Cary

The **NE-16F-** Cells are compatible with Varian Cary Eclipse and include a **"liquid-tight" Polyethylene Lid** in addition to the Teflon Lid.

The **NE-26F-** Cells are compatible with Perkin-Elmer.

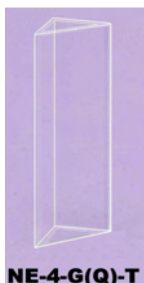
Approx. Volume (µl)	160	100	50	40	10
Sample Chamber Height (mm)	8	5	2.5	2	1
Sample Chamber Width (mm)	2	2	2	2	1
Q (Far UV Quartz)					
Cat. No. (Z = 8.5mm)	NE-16F-1-Q-10-A	NE-16F-2-Q-10-A	NE-16F-3-Q-10-A	NE-16F-4-Q-10-A	NE-16F-5-Q-10-A
Cat. No. (Z = 15mm)	NE-16F-1-Q-10-B	NE-16F-2-Q-10-B	NE-16F-3-Q-10-B	NE-16F-4-Q-10-B	NE-16F-5-Q-10-B
Cat. No. (Z = 20mm)	NE-16F-1-Q-10-C	NE-16F-2-Q-10-C	NE-16F-3-Q-10-C	NE-16F-4-Q-10-C	NE-16F-5-Q-10-C
Price / each	\$370.00	\$370.00	\$370.00	\$370.00	\$380.00
Q (Far UV Quartz)					
Cat. No. (Z = 8.5mm)	NE-26F-1-Q-10-A	NE-26F-2-Q-10-A	NE-26F-3-Q-10-A	NE-26F-4-Q-10-A	NE-26F-5-Q-10-A
Cat. No. (Z = 15mm)	NE-26F-1-Q-10-B	NE-26F-2-Q-10-B	NE-26F-3-Q-10-B	NE-26F-4-Q-10-B	NE-26F-5-Q-10-B
Cat. No. (Z = 20mm)	NE-26F-1-Q-10-C	NE-26F-2-Q-10-C	NE-26F-3-Q-10-C	NE-26F-4-Q-10-C	NE-26F-5-Q-10-C
Price / each	\$420.00	\$420.00	\$420.00	\$420.00	\$475.00

Triangular Cells

Triangular Fluorometer Cell

Three windows and base polished
 External Height - 45mm
 External Width - 12.5mm
 Internal Widths - 10mm x 10mm ...
 ... x 14mm
 External Length - 12.5mm

Compatible with Varian Cary Eclipse.



G (Optical Glass)	
Cat. No. - Square Base	NE-4-G-S
Cat. No. - Triangular Base	NE-4-G-T
Price / each	\$158.00
Q (Far UV Quartz)	
Cat. No. - Square Base	NE-4-Q-S
Cat. No. - Triangular Base	NE-4-Q-T
Price / each	\$227.00

Triangular Fluorometer Cell with Teflon Stopper

Three windows and base polished
 External Height - 48mm
 External Width - 12.5mm
 Internal Widths - 10mm x 10mm ...
 ... x 14mm
 External Length - 12.5mm

Compatible with Varian Cary Eclipse.



G (Optical Glass)	
Cat. No. - Square Base	NE-24-G-S
Cat. No. - Triangular Base	NE-24-G-T
Price / each	\$210.00
Q (Far UV Quartz)	
Cat. No. - Square Base	NE-24-Q-S
Cat. No. - Triangular Base	NE-24-Q-T
Price / each	\$284.00

Cells for Ultraviolet-Visible and Fluorescence

Dual Pathlength Cell

Four windows and base polished
 External Height - 45mm
 External Width - 12.5mm
 External Length - 12.5mm



NE-52-Q-

Dual Pathlength Cell with Teflon Stopper

Four windows and base polished
 External Height - 48mm
 External Width - 12.5mm
 External Length - 12.5mm



NE-53-Q-

Pathlength (mm)	1 or 10	2 or 10	5 or 10
Approx. Volume (ml)	0.4	0.8	2.0
Q (Far UV Quartz)			
Cat. No.	NE-52-Q-1	NE-52-Q-2	NE-52-Q-5
Price / each	\$210.00	\$210.00	\$210.00

Pathlength (mm)	1 or 10	2 or 10	5 or 10
Approx. Volume (ml)	0.4	0.8	2.0
Q (Far UV Quartz)			
Cat. No.	NE-53-Q-1	NE-53-Q-2	NE-53-Q-5
Price / each	\$243.00	\$243.00	\$243.00

Tandem-Divided Cell with Teflon Lid

Five windows and base polished
 External Height - 45mm
 External Width - 12.5mm
 External Length - 12.5mm
 Inside Dimensions (per chamber)
 Series - Internal Width - 10mm
 Series - Pathlength - 4.4mm
 Parallel - Internal Width - 4.4mm
 Parallel - Pathlength - 10mm



NE-55-Q

Tandem-Divided Cell with Teflon Stoppers

Five windows and base polished
 External Height - 48mm
 External Width - 12.5mm
 External Length - 12.5mm
 Inside Dimensions (per chamber)
 Series - Internal Width - 10mm
 Series - Pathlength - 4.4mm
 Parallel - Internal Width - 4.4mm
 Parallel - Pathlength - 10mm



NE-56-Q

Approx. Volume (per chamber)	1.5 ml
Q (Far UV Quartz)	
Cat. No.	NE-55-Q
Price / each	\$193.00

Approx. Volume (per chamber)	1.5 ml
Q (Far UV Quartz)	
Cat. No.	NE-56-Q
Price / each	\$280.00

Tandem-Divided Mixing Cell with Teflon Lid

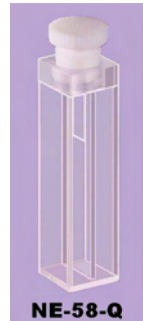
Five windows and base polished
 External Height - 45mm
 External Width - 12.5mm
 External Length - 12.5mm
 Inside Dimensions (per chamber)
 Series - Internal Width - 10mm
 Series - Pathlength - 4.4mm
 Parallel - Internal Width - 4.4mm
 Parallel - Pathlength - 10mm



NE-57-Q

Tandem-Divided Mixing Cell with Teflon Stopper

Five windows and base polished
 External Height - 48mm
 External Width - 12.5mm
 External Length - 12.5mm
 Inside Dimensions (per chamber)
 Series - Internal Width - 10mm
 Series - Pathlength - 4.4mm
 Parallel - Internal Width - 4.4mm
 Parallel - Pathlength - 10mm



NE-58-Q

Approx. Volume (per chamber)	1.0 ml
Q (Far UV Quartz)	
Cat. No.	NE-57-Q
Price / each	\$245.00

Approx. Volume (per chamber)	1.0 ml
Q (Far UV Quartz)	
Cat. No.	NE-58-Q
Price / each	\$280.00

Circular Dichroism Cells

Rectangular CD Cell with Teflon Stopper

All Circular Dichroism Cells have strain-free windows to eliminate birefringent lines over the material transmission range.

Two opposite windows polished
External Width - 12.5mm
Internal Width - 10mm



Space Compensators

For properly positioning 1, 2 and 5mm pathlength cells in a 10mm pathlength sample cavity.

Cat. No.	For Cell Path
77000-1	1mm
77000-2	2mm
77000-3	5mm

Price / each \$54.00

Compatible with Jasco J-810, J-815 and J-700 Series and Aviv CD spectrometers including Models 202 and 400.

Pathlength (mm)	1	2	5	10
Approx. Volume (ml)	0.4	0.7	1.7	3.5
External Height (mm)	55	55	48	48
External Length (mm)	3.5	4.5	7.5	12.5
G (Optical Glass)				
Cat. No.	NE-21CD-G-1	NE-21CD-G-2	NE-21CD-G-5	NE-21CD-G-10
Price / each	\$105.00	\$105.00	\$105.00	\$90.00
Q (Far UV Quartz)				
Cat. No.	NE-21CD-Q-1	NE-21CD-Q-2	NE-21CD-Q-5	NE-21CD-Q-10
Price / each	\$165.00	\$165.00	\$165.00	\$135.00

Ultraviolet - Visible Reference Standards

Wavelength Glass Filters

The following glass filters yield sharp, narrow, stable and evenly distributed peaks in the ultraviolet and/or visible wavelength ranges, making them ideal for instrument wavelength checks:

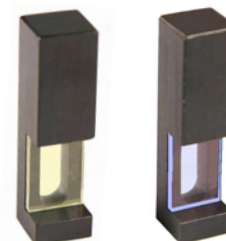
Holmium Oxide Glass - for ultraviolet and visible wavelengths

Didymium Glass - for visible wavelengths

All glass filters are mounted into holders, which are 12.5mm x 12.5mm x 45mm high and are the size of standard 10mm pathlength cells.

These standards are **not** NIST Certified and are intended for inexpensive, quick instrument λ checks.

A spectrum showing the wavelengths is provided.



Cat. No.	Description	λ Range	$\approx \lambda$ Peaks (nm)	Price / each
71101-1	Holmium Oxide Glass Filter	240 nm – 640 nm	241 - 279 - 287 - 333 - 360 - 418 445 - 453 - 460 - 536 - 637	\$95.00
71101-2	Didymium Glass Filter	400 nm – 900 nm	440 - 473 - 480 - 514 - 529 - 573 587 - 685 - 740 - 748 - 807 - 879	95.00

Neutral Density Screens

For instrument Absorbance (or %T) "quick" checks in the ultraviolet and visible wavelength regions. Absorbance remains constant at all wavelengths.

The four different Absorbance values (**0.5A, 1.0A, 1.5A, 2.0A**) can also be used for evaluating linearity so as to conform with the Beer-Lambert Law ($A=abc$).

A linearity check will require at least three neutral density screens.

All neutral density screens are mounted into holders, which are 12.5mm x 12.5mm x 45mm high and are the size of standard 10mm pathlength cells.

These standards are **not** NIST Certified and are intended for inexpensive, quick instrument A(%T) checks.

A spectrum showing absorbance is provided.



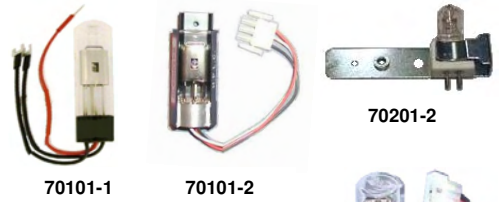
Cat. No.	Description	Absorbance	Price / each
71102-1	Neutral Density Screen	0.5A	\$95.00
71102-2	Neutral Density Screen	1.0A	95.00
71102-3	Neutral Density Screen	1.5A	95.00
71102-4	Neutral Density Screen	2.0A	95.00

Ultraviolet-Visible Source Lamps

The source lamps below are **prealigned** (with some exceptions), requiring **no** further adjustments for direct replacement. Some lamps (mostly found in older spectrometers) were not initially prealigned by the instrument manufacturer; therefore, alignment adjustments made by the user may be necessary.

Perkin-Elmer

Cat. No.	Instrument Models	Lamp Type	Mfger. No.	Price / ea
70101-1	Lambda 1, 3, 3A, 3B	Deuterium	C055-0505	\$348.00
70101-2	Lambda 2, 5, 7, 9, 10, 11, 12, 14, 15, 16, 17, 18, Bio, 19, 20, 25, 35, 40, 45, 800, 900	Deuterium	B016-0917	495.00
70201-2	Lambda 1, 2, 3, 3A, 3B, 5, 7, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, Bio, 20, 25, 35, 40, 45, 800, 900	Tungsten	B011-4620	115.00



Beckman

Cat. No.	Instrument Models	Lamp Type	Mfger. No.	Price / ea
70102-1	DU-40, -50	Deuterium	585699	\$348.00
70102-2	DU-60, -62, -64, -65, -68	Deuterium	596791	655.00
70102-3	DU-70	Deuterium	523253	655.00
70102-4	DU-600, -620, -630, -640, -650, -7000, -7400, -7500	Deuterium	514366	645.00
70202-1	DU-40, -50, -60, -62, -64, -65, -68, -70, -600, -620, -630, -640, -650, -7000, -7400, -7500	Tungsten	945672	39.00



Hewlett-Packard (Agilent)

Cat. No.	Instrument Models	Lamp Type	Mfger. No.	Price / ea
70103-1	8450A	Deuterium	08450-60106	\$545.00
70103-2	8451A	Deuterium	08451-60100	458.00
70103-3	8452A	Deuterium	08452-60104	458.00
70203-1	8450A, 8451A, 8452A	Tungsten	08452-60121	458.00
70103-4	8453A, 8453E	Deuterium	2140-0605	545.00
70203-2	8453A	Tungsten	G1103-60001	160.00



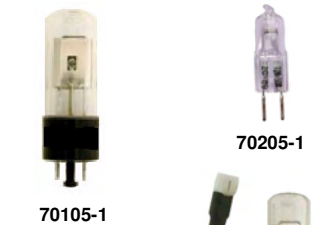
Hitachi

Cat. No.	Instrument Models	Lamp Type	Mfger. No.	Price / ea
70104-1	U-1000, -1100, -1500, -1800, -2000, -2001, -2800, -3010, -3210, -3310, -3410, -3501, -4001, -4100	Deuterium	885-3570	\$430.00
70204-1	U-1000, -1100, -2000, -2001, -3010, -3310	Tungsten	-	110.00
70204-2	U-1500, -1800, -2800, -3210, -3410, -3501, -4001, -4100	Tungsten	-	195.00



Shimadzu

Cat. No.	Instrument Models	Lamp Type	Mfger. No.	Price / ea
70105-1	UV-120, -120-01, -140, -150, -160, -160A, -180, -190, -200, -202, -210, -210A, -240, -250, -260, -265, -350, -360, -365, -370, -1200, -1201, -1600, -2100, -3100 (&PC), -3101PC, Biospec 1601	Deuterium	062-65055-05	\$340.00
70205-1	All above Models	Tungsten	062-65004-06	45.00



Varian (Cary)

Cat. No.	Instrument Models	Lamp Type	Mfger. No.	Price / ea
70106-1	Cary 1, 3, 4, 5, 100, 300, 400, 500	Deuterium	56-100218-00	\$340.00
70206-1	All above Models	Tungsten	56-100217-00	43.00

