

## Online UV-Dissolution: In Situ Measurement Using Fiber Optics

Provided to Help You Get the Most from Your Agilent Dissolution Products!



### Why Choose Fiber-optic UV Dissolution?

Save time with real-time sample analysis and reporting of dissolution data using in situ fiber-optic probes. Also, no pumps or moving media/samples means no system flush is required. This greatly improves turnaround time and maximizes efficiency – simply rinse some key accessories and you're ready to begin the next test.

### Advantages of Fiber-optic UV Dissolution

- Ideal for rapid time point requirements – can measure samples every 45 seconds
- Analysis directly in the dissolution vessel eliminating contamination, carryover, and dilution of samples
- Software automatically compensates for excipient and background interferences
- Simplified cleaning requires only rinsing of the fiber-optic probes and tips
- Fewer moving parts and consumables (e.g., filters, tubing) reduce cost of ownership and maintenance

The Fiber Optic Online UV Dissolution System provides versatility and flexibility while delivering the highest level of automation and data integration for your UV dissolution needs. The Cary 60 UV-visible



spectrophotometer offers excellent optical transmission and reproducibility capabilities, and the extended linear photometric range is ideally suited for superior fiber optic analysis.

The fiber optic multiplexer ensures precise and rapid position-to-position movement to decrease time needed between sample time points. The system's probes use silica fibers for optimal performance, and interchangeable tips make cleaning and replacement cost-efficient and easy. Tip pathlengths from 1 to 20 mm are available to accommodate a wide variety of sample concentrations.



## Helpful Links

- [Online UV-Dissolution Systems Brochure](#)
- [Online UV-Dissolution Systems – Online Source Book](#)
- [Cary 60 Fiber Optic Dissolution - webpage](#)

## White Papers / Technical Overviews

- [Increase Bandwidth Using Fiber Optics in Dissolution](#)
- [Method Development and Validation for Online UV-Dissolution Methods Using Fiber-Optic Technology](#)
- [Practical Solutions 18.1 – Fiber Optic Feature](#)

## Additional Information

- [Agilent UV Dissolution Systems Video](#)
- [Cary 60 UV-Vis Specifications](#)
- [Cary WinUV Software with SCM/SDA for Compliance](#)



## Agilent Ordering Information

### System:

#### Cary WinUV Software - UV Dissolution Fiber Optic Packages and Software

Description	Part No.
<b>Options for G7927A</b>	
708-DS and Cary 60 Fiber Optic Online UV Dissolution System	G7927A
Note: Software and PC ordered separately (G4972AA or G9262AA)	
Add AutoTemp, for 708-DS	G7927A #105
Add low actinic - red, accessories	G7927A #110
Delete basket shafts and baskets	G7927A #120
Delete paddles	G7927A #125
PTFE-coated paddles	G7927A #126
PEEK paddles	G7927A #127
708-DS Dissolution Apparatus, 2L	G7927A #140
Verified accessories	G7927A #145
Fiber optic removable tip, 1 mm, 6/pk	G7927A #300
Fiber optic removable tip, 2 mm, 6/pk	G7927A #301
Fiber optic removable tip, 5 mm, 6/pk	G7927A #302
Fiber optic removable tip, 10 mm, 6/pk	G7927A #303
Fiber optic removable tip, 20 mm, 6/pk	G7927A #304
Note: One (1) selection is required from options 300-304 for G7927A.	
Add printer, for 708	G7927A #880
Delete 708-DS Dissolution Apparatus	G7927A #900
Dual system 708-DS	G7927A #920
UV Dissolution Software, fiber optic, without PC	G4972AA
UV Dissolution Software Bundle, fiber optic, with PC, printer, monitor	G9262AA
Add Installation Service	G7927A #44K
Add Familiarization Service	G7927A #44L



**Accessories:**

**Cary WinUV Software - UV Dissolution Fiber Optic Accessories**

<b>Description</b>	<b>Part No.</b>
Benchtop table for UV dissolution system, with keyboard tray	11-1125
4-port USB-to-serial converter	11-1011
External cuvette holder, 1 cm, for FO	11-1012
External cuvette holder cover, 1 cm	11-1014
Fiber optic patchcord, 20 in.	11-1424
Fiber optic probe, 2 m, no tip, for 7000, 7010, 708-DS, 709-DS	11-1425
Fiber optic probe, 2 m, no tip, for 7025/7030	11-1426
Fiber optic removable tip, 1 mm	11-1429
Fiber optic removable tip, 2 mm	11-1430
Fiber optic removable tip, 5 mm	11-1435
Fiber optic removable tip, 10 mm	11-1440
Fiber optic removable tip, 20 mm	11-1445
Fiber optic probe holder, for Distek evaporation cover	12-0592



### **Cary 60 UPGRADE:**

Upgrade Your Cary 50/60 Increase productivity as laboratory needs change by using your dissolution apparatus and spectrophotometer with an online UV dissolution system. Add the necessary software, cell changer or multiplexer, and other accessories to maximize the efficiency of your instrumentation and streamline analysis. Fiber optic probes/tips and flow cells must be ordered separately depending on the desired pathlength.

#### **Cary 60 Upgrade Options**

---

Cary 60 fiber optic upgrade, includes Cary WinUV software for fiber optic UV dissolution and multiplexer, for 708-DS (probes/tips ordered separately)	11-1141
---	---------

---

The performance testing of ointments, creams and gels has presented challenges to properly evaluate the in vitro release of the active ingredient from the formulation and quantitate the rate of diffusion across a barrier such as an artificial membrane.

The skin is extensive and one of the most readily accessible organs of the human body. It has a surface area of approximately 1.7 to 2 square meters. It is comprised of three main tissue layers: Epidermis (stratum corneum), Dermis and Hypodermis (subcutaneous tissue). Topical products for systemic use include not only transdermal drug delivery systems but also, ointments creams and gels. The stratum corneum is the principle barrier to systemic drug administration and the in vitro system should simulate the release of the drug at this route of administration.

## Agilent Sites and Services for Your Dissolution Workflow



Agilent Dissolution Systems Digital Source Book

[www.nxtbook.com/nxtbooks/agilent/dissolution\\_sourcebook/index.php](http://www.nxtbook.com/nxtbooks/agilent/dissolution_sourcebook/index.php)

Dissolution Exchange

[www.dissolution.chem.agilent.com](http://www.dissolution.chem.agilent.com)

Dissolution 1-on-1 Training

[www.dissolution.chem.agilent.com/learn-dissolution-1-on-1](http://www.dissolution.chem.agilent.com/learn-dissolution-1-on-1)

Dissolution Hotline (Email Address)

[dissolution.hotline@agilent.com](mailto:dissolution.hotline@agilent.com)

Dissolution Discussion Group (DDG)

[www.dissolution.com](http://www.dissolution.com)