

### DIFFUSION CELL APPARATUS (Model JFDC – 07)

In-vitro skin permeation studies of topical formulations



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The Vertical Franz Diffusion Cell is a simple, reproducible test for measuring the in vitro drug release from creams, ointments and gels. The Franz Cell consists of two primary chambers separated by a membrane. The test product is applied to the membrane via the top chamber- donor compartment. The bottom chamber- receptor compartment contains fluid from which samples are taken at regular intervals for analysis. This testing determines the amount of active drug that has permeated the membrane at each time point. The Transdermal Diffusion cell apparatus is remarkably simple to operate; the system is supplied with:

- Seven stage magnetic stirrer.
- Water heater & Water circulation system with water level indicator.
- Touch screen control unit for control of speed and temperature.
- Cell holders.
- Diffusion Cells & accessories pack.

#### **Features:**

- Useful for diffusion cell experiments.
- External temperature sensor probe to determine temperature of media inside the cell.
- Data logging for stirring speed and temperature at sampling interval.
- 10 in built programs.
- Audio/visual alarms for sampling intervals.
- Touch screen display.
- Highly accurate stirring speeds and temperature.
- Water Circulation System with water level sensors to avoid damage to heating element.
- Password protected software and admin features.
- Software for data collection & report generation.
- Calibration report generation facility in the software.
- Graphical presentation of data.
- Provision to add experiment Title & comment.
- Data can be converted to excel & Pdf file for further analysis.

#### System Specification & Models:

6	Models	
Specification	JFDC 07	
	Stirrer Drive	
Stirrer Drive	7 Stage	
Material of Construction of Enclosure	S.S. 304	
RPM Indicator	Digital (Touch screen)	
Speed Range & Accuracy	200-800rpm (±1%)	
	Water Circulation System	
Material of Construction of Enclosure	S.S. 304	
Temperature Range & Accuracy	5°C Above Ambient to 60°C (±1.0°C)	
Inter Cell Temperature Variations	±1.0°C	
Inter Cell Stirring Speed Variations	±1%	
Temperature Indicator	Digital (Touch screen)	
Certifications	CE Compliant	
Power Requirements	220/230V AC 50Hz	
	110/120V AC 50-60Hz*	

<sup>\*</sup>Needs to be specified in order information

#### Ordering Information:

Model	Stirring Drive	Cells Supplied	Accessories supplied	Optional
JFDC 07	7 stage	7 Nos. of cell of 20ml volume	Clamps-7, Adequate Silicon Tubing for Interconnections, Lid for cell sampling arm -7, Stirring Bars- 7, Dosage Disc and Disc Holders-7 each, Luer Lock Connectors For Cell Interconnections-06pairs, IQ, OQ Documents, RS232 Cord with RS232 to USB convertor-1, software DVD.	<ul> <li>a. Diffusion Cell of 5ml, 7ml, 12ml.</li> <li>b. Precise Sample Withdrawal Syringe.</li> <li>c. Inlab Calibration Certificate for Diffusion cell.</li> </ul>

Note: Orchid's continuing product development makes specifications subject to change without prior notification. **Software Report Formats:** 







