

List of Services

1. Purified Water

Type I: Ultrapure water

Type II: Pure water

Reverse osmosis water (RO)

2. Instrument

Group I: Liquid Chromatography

Group II: Gas Chromatography

Group III: Spectrometer

Group IV: Bioscience Instrument

Group V: Sample Preparation

3. Amino Acid Analysis

- Total Amino Acid
- Free Amino Acid

4. Analytical Service

Tailor-made service as requested by customer using our instruments.

Please contact CIF directly.

How to contact us?

Central Instrument Facility

Chaloemprakiet Building, 6th Floor, Room K629,
Faculty of Science, Mahidol University,
272 Rama VI Road, Phayathai, Ratchathewi,
Bangkok, 10400 Thailand

Phone: 02-201-5973 or 5970, 02-201-5985-7

Fax: 02-201-5972

Email: sccif@mahidol.ac.th

Website: <http://science.mahidol.ac.th/scrc/cif>

Service Hours

Monday-Friday 09.00-17.00 hr

Close on Saturday, Sunday and National Holiday

Lunch break 12.00-13.00

Equipment Reservation

09.00-16.00 hr

*Customers must make reservation 1 day in advance



Mahidol University
Faculty of Science

Freeze Dryer / Lyophilizer



Central Instrument Facility

Tel: 02-201-5973, 02-201-5970

Fax: 02-201-5972

Email: sccif@mahidol.ac.th

<http://science.mahidol.ac.th/scrc/cif>





Brand: Thermo Scientific
Model: Supermodulyo-230

Description and Specification:

The SuperModulyo Freeze Dryer is a high capacity, 20-liter ice condenser designed specifically for the large volume user. The SuperModulyo features a horizontally mounted all stainless steel, smooth wall ice condenser. The horizontal design and hot gas defrost system allow the user to empty the ice condenser quickly. The SuperModulyo includes a 285* liter/minute two stages, oil sealed, rotary vane vacuum pump and is ideal for use with a wide variety of drying accessories. Accessories range from the simple eight or twenty-four port flask manifolds to the pilot production scale, temperature controlled, three-shelf chambers. *285 L/Min is the rating for the 220VAC 60Hz version of the pump.

Technical Specifications

- Maximum Condenser Chamber Capacity 20 Liters
- Ice Removal Capacity (in 12 hours) 13.2 lbs, (6 kg)
- Ice Removal Capacity (in 24 hours) 23.1 lbs, (10.5 kg)
- Maximum Ice Capacity 39.6 lbs, (18 kg)
- Operating Temperature ~-50 °C
- Temperature Display Range +100 °C to -100 °C
- Pressure Display Range 10 µbar to 5.0 mbar
- Refrigeration Compressor Type 3/4 hp hermetic unit
- Pump Capacity 285 l/min @ 60 Hz
- Pump Maximum Vacuum 1.5 mtorr (1.95 x 10⁻³ mbar)
- Pump Oil Capacity 1 Liter
- Dimensions (H X W X D) 35.5 x 25.6 x 27.6 (in), 900 x 650 x 700 (mm)
- Weight 396 lbs (180 kg)
- Power Requirements SuperModulyo220, 220 VAC/60 Hz, 10.0 A
- SuperModulyo230, 230 VAC/50 Hz, 10.0 A



Thermo Electron offers specially designed freeze drying flasks in three convenient sizes: 300 ml, 500 ml and 1000 ml.

Ordering Information and Specifications

Cat No	Description	Working volume
F056 58 000	300 ml flask	75 ml
F056 50 000	500 ml flask	125 ml
F056 57 000	1 liter flask	250 ml

Service of Freeze Dry:

Please contact CIF directly.

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