

Canopy Module

Turn your Fitmate into a Gold Standard calorimeter with the optional Canopy module!



- ▶ Flow-based dilution Canopy Hood for Indirect Calorimetry measurements
- ▶ Turbine with integrated blower with pre-set speeds based on subject weight
- ▶ Highly comfortable for even long lasting tests
- ▶ Design and removable veil for easy cleaning and disinfection

The canopy hood module allows to measure Resting Metabolic Rate via the dilution-technique, which is considered the “Gold Standard” for indirect calorimetry in clinical applications.

The use of a ventilated hood makes the test highly comfortable allowing patients to breathe freely. The ventilated hood can also be used for long periods of time with minimal discomfort and no air leaks from the system.

The module consists of a large and comfortable transparent hood connected to a blower that guarantees air flow inside the hood. The blower pumps air out at a defined flow rate, chosen among five different dilution flows dependent on subject weight.

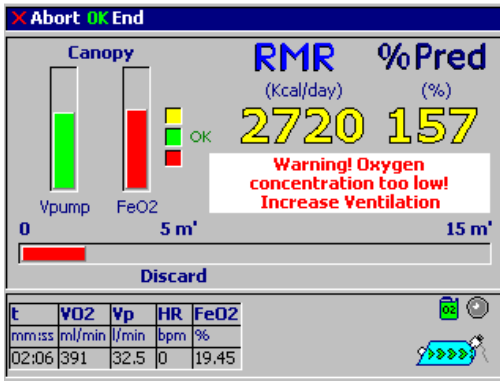
The patient lies in bed and comfortably breathes inside the hood, where the expired gas dilutes with room air. A sample of this mixture is then conveyed to the turbine and to the sampling line in order to measure oxygen concentration and ventilation parameters.

The Fitmate screen prompts messages and security alerts when ventilation is not detected or when oxygen concentration is too low or too high; in this case the flow rate can be regulated on the blower in order to keep a steady concentration of O₂ inside the hood.

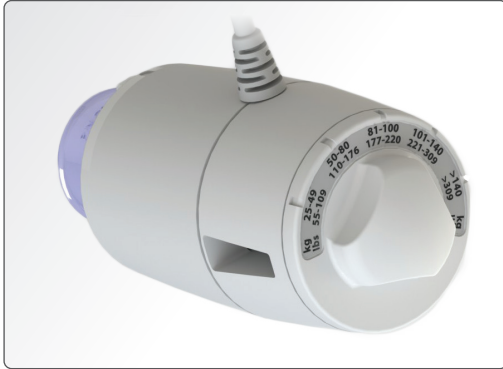
For safety reasons the blower is equipped with 4 AA batteries (not rechargeable) to prevent failures due to power outage.

The bubble shape design and the removable veil allow easy cleaning and disinfection of the canopy hood.





Fitmate LCD display shows measure values and warning alerts in real time.



The canopy blower allows to select and adjust the correct dilution flow rate based on subject's weight.

Technical Specification

Product	Description	REF
Canopy Module	Resting Metabolic Rate measurements	C03950-01-11
Standard packaging	Canopy bubble hood, turbine with integrated blower, alarm control unit, AA batteries (4 pcs.), canopy backpack	
Hardware		
Dimensions	47x33.5x24.5 cm	
Canopy Volume	17.7 L	
Flow rate range	12-44.4 L/min	
Blower internal battery	4 AA	
Flowmeter		
Turbine Ø-28mm		
Type	Bidirectional Digital Turbine	
Flow Range	0-16 L/s	
Accuracy	± 2% or 20 mL/s	
Resistance	<0.8 cmH2O /L/s @ 14L/s	
Ventilation Range	0-300 L/min	
Accuracy	± 2% or 200 ml/min	

Canopy Module is available to all models of Fitmate starting from S/N 2009111000 and to all models of Fitmate Pro and Fitmate MED starting from S/N 2009101000.

Validazioni:

- Nieman D. et al. "Validation of COSMED's Fitmate™ in measuring oxygen consumption and estimating resting metabolic rate". *Research in Sports Medicine*, 14: 1-8, 2006

- Lupinski L., Singer P. et al. "Comparison between the Fit Mate metabolic system and the Deltatrac II metabolic monitor in the measurement of resting energy expenditure and oxygen consumption in non-ventilated patients". *Clinical Nutrition Supplements (January 2010)*, 5 (2), pg. 65-66

- Vandarakis D. et al. "The Reliability and Validity of the COSMED Fitmate Canopy System for Assessing Resting metabolic Rate". *Official Journal of the American College of Sports Medicine Vol.44 No. 5 Supplement S683*



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