

Mealstream (Series 5) CTM5 208v 60Hz FCC Grant Application

Operational Description

The Mealstream 501 (FCC ID: PCVCTM5206015A) is a combination microwave oven intended for commercial use and is a variant of the model previously assessed under the FCC ID: PCVCTM3206015A .

The oven is used to either reheat or prime cook food. The oven has two heat sources available; a 2.5 kW ^{*See note 1} resistive heating element located at the rear of the oven cavity, and two magnetrons which launch/produce microwave energy from the top of the cavity.

Energy is evenly distributed in the cavity via a high speed fan whereas microwave energy is circulated by a rotating stirrer antenna located in a sealed roof section of the oven.

A micro-controller facilitates control of the oven and allows for specific microwave powers and cavity temperatures to be set.

Microwave Power	Cavity Temperature
Fan only	0 (Off)
25%	150°C (300°F)
50%	175°C (350°F)
75%	200°C (400°F)
100%	225°C (440°F)
	250°C (480°F)

Both energy sources can be used in combination. This results in an oven which has the speed of a microwave and yet yields a traditional cooking result.

Microwave leakage is prevented by utilising a fully welded cavity and a door with a intrusive 1/4 wave trap system. The door is monitored by a primary and secondary interlock system.

* Note 1: The PCVCTM3206015A variant already FCC certified has a 3kW element.