

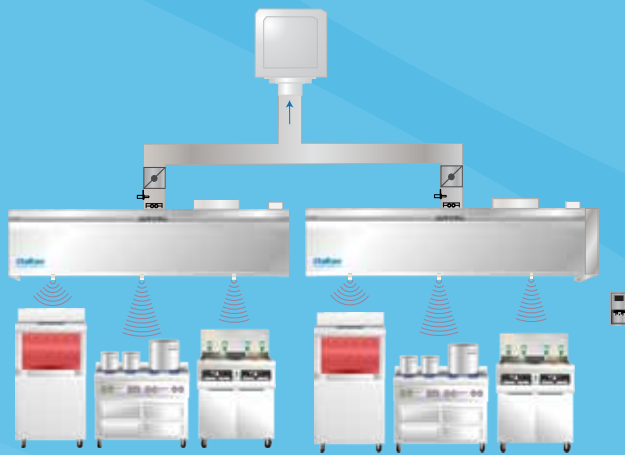
# Halton M.A.R.V.E.L.

## Intelligent Demand Controlled Ventilation System for the Professional Kitchen

Features	M.A.R.V.E.L.	Melink	Captive Aire	Spring Air
Detection and Measurement of Multiple Sensors to Determine Cooking Status	✓			
Remote Access for 24/7 Scheduling	✓			
Infrared Cooking Activity Detector	✓			
Ability to Remotely Monitor System	✓	✓		✓
Minimum Operating Air Flow %	30%	50%	80%	40%
Continous Measurement of Exhaust Air Flow	✓			
Proportional 0-100% Supply Air Signal to BMS Based on Measured Exhaust	✓			
Independent Control of Multiple Hoods on a Single Duct and Fan	✓			
Web Enabled	Standard	Option	No	Option
Ability to Remotely Control System	✓			✓
Customizable Setpoints	✓			
Automatic Graph Generation of Logged Energy Data	✓			
Data Logging Capability	Unlimited	3 days	none	1 year
Automatic System Calibration and Balancing	✓			
ModBus Compatible	✓			
BacNet and LonWorks compatible with Gateway Processor	✓			✓
System Expandibility for Facility Monitoring of Critcal Systems (RTU's, Refrigeration, Lighting, etc)	✓			

# M.A.R.V.E.L.

## Advantages and features:



- Adjustment of the exhaust and supply air flow rates in real time and according to the use of each item of cooking equipment installed in the kitchen.
  - Individual and independent variation of air flow rates, whether the installations are equipped with just one or several fans.
  - A 65% overall reduction in flow rates when M.A.R.V.E.L. and Capture Jet Systems are combined.
  - Reduction in the energy consumption related to heating and/or cooling of the fresh compensation air in kitchens.
  - Permanent optimization of the power consumption of the fan motors as a result of the variable air flow rate and pressure regulation.
- Time savings in installation and start-up, thanks to a self-calibration procedure that eliminates complex manual balancing of the air system.
  - The exhaust fan starts up automatically when the cooking equipment is turned on and stops as soon as it is switched off. The system supports minimum permanent ventilation settings. It has a manual, programmed on schedule and automatic on/off function.
  - The temperature and relative humidity in the kitchen can be controlled to ensure optimal comfort and hygiene.
  - The system provides extensive data reporting and connectivity capabilities.
  - Fire safety functions enable extraction to be switched to maximum flow and compensation to be switched off. The dampers are equipped with automatic return to fully open or closed position according to statutory requirements.
  - The air flow control units of the M.A.R.V.E.L. system are part of the common monitoring platform for solutions employing the Halton High Performance Kitchen concept. M.A.R.V.E.L. is 100% compatible with Capture Ray UV technology monitoring systems and EcoloAir Air Purification Systems.
  - The system is pre-set in the factory. Therefore, commissioning, performed by a professional Halton technician, involves only adjustment according to the actual site configurations and the final conditions of use of the equipment.

