

# HRV20 HE Q Plus

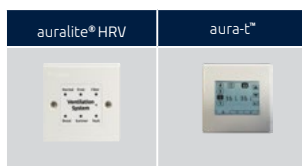
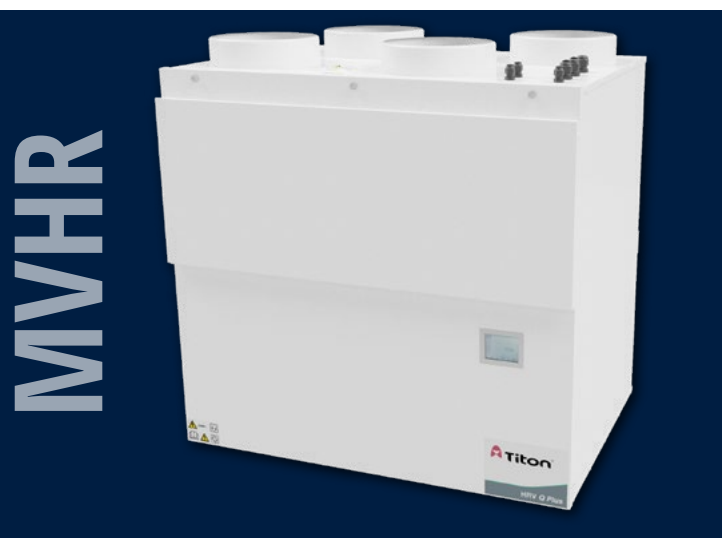
Ultra energy efficient Heat Recovery Ventilation unit

## For use in large sized dwellings

The new HRV20 HE Q Plus continuously running whole-house ventilation unit with heat recovery has been specifically designed to expand Titon's current HRV range by offering airflows of up to 178l/s (640 m³/h).

Combining extremely low power consumption and a highly efficient heat exchanger (up to 92%) specifically designed to enhance SAP performance via Appendix Q and can be incorporated into larger apartments or dwellings.

Recognised and listed in the UK Product Characteristics Database and includes intelligent humidity options through controller options.



## Features & Benefits

- Highly versatile compact unit
- Extremely low Specific Fan Power of 0.48 W/l/s
- Highly efficient heat exchanger; up to 92%
- Airflow up to 178l/s (640 m³/h) at 100 Pa
- Accepts 200mm diameter ducting
- Intelligent frost protection, stepped reduction of supply air rates prevents HRV unit from freezing
- ISO Coarse 65% (G4) bypass filter set fitted as standard. ISO Coarse 65% (G4)/ISO ePM1 75% (F7) available on request.
- Fully adjustable boost overrun timer 0-60 minutes; can be used with non-latching (momentary) switch to prevent unit from being accidentally left in boost mode
- Volt free switching control
- Intelligent controller, quick and easy to commission
- aura-t™ fitted on board as standard for HMB models and optional for B models
- Quick fix mounting bracket
- IP33 rating
- Patented
- Independent fan adjustment
- Effective in reducing pollutants in the home and improving Indoor Air Quality (IAQ), therefore reducing the risk of Toxic Home Syndrome
- Available in left and right handed configurations
- Intelligent Summer Bypass & humidity controls
- SUMMERboost\* facility

### Eco HMB Models:

- Fitted with aura-t™ controller on board as standard

### Eco B Models:

- Compatible with Eco-aura range; aurastat\*, auramode\* and aura-t™ controllers and auralite® HRV (TP519) status indicator
- Duct heater control (requires independent power supply)
- BMS compatible via RS485 (subject to limitations, additional software requirements and specification with any order)
- Low voltage switching (x 3) and live switch (x 2)
- 4 x 0-10v proportional inputs for local demand control room sensors

## Product Codes

HRV20 HE Q Plus HMB Eco aura-t™ ready -  
**TP652HMB/544** - (left hand config) or  
**TP652HMB/RH** - (right hand config) - Energy Rating A  
 Fitted with drop down filter flap panel

HRV20 HE Q Plus B Eco-aura controls ready -  
**TP653B/LH** (left hand config) or  
**TP653B/RH** (right hand config) - Energy Rating A+  
**TP653BC** (Cold Climate) - Energy Rating A+  
 Fitted with drop down filter flap panel

### Filters:

**XP2010561** - ISO Coarse 65% (G4) bypass filter set fitted as standard.

**XP2010929** - ISO Coarse 65% (G4)/ISO ePM1 75% (F7) available on request.

## Standards

Conforms to requirements of UK statutory Building Regulations and Technical Standards for Ventilation and BRE 398

SAP Appendix Q tested

Exceeds requirements of Building Regulations Approved Document L (England & Wales)

EU RoHS Directive compliant.

Conforms to requirements of EC council directives relating to Electromagnetic Compatibility and Electrical Safety:  
 2006/95/EC (LVD), 2004/108/EC (EMC) EN 60335-1:2002/A2:2006, EN 60335-2-80:2003/A1:2004.

CE and UKCA marked.

## Specification

**Dimensions:** HRV20 HE Q Plus - 752mm wide x 708mm high (excluding ports) x 533mm deep (549mm with mounting bracket).

**Weight:** 46kg.

**Finish:** White Paint.

### Materials:

Housing: Zintec sheet steel housing, powder coated white  
 Internals: Expanded polypropylene (EPP)  
 Heat exchanger: Polystyrene  
 Internal insulation: Closed cell foamed Nitrile rubber, class 'O' fire rating  
 Standard filters: ISO Coarse 65% (G4).

**Guarantee period:** 3 years (UK only).

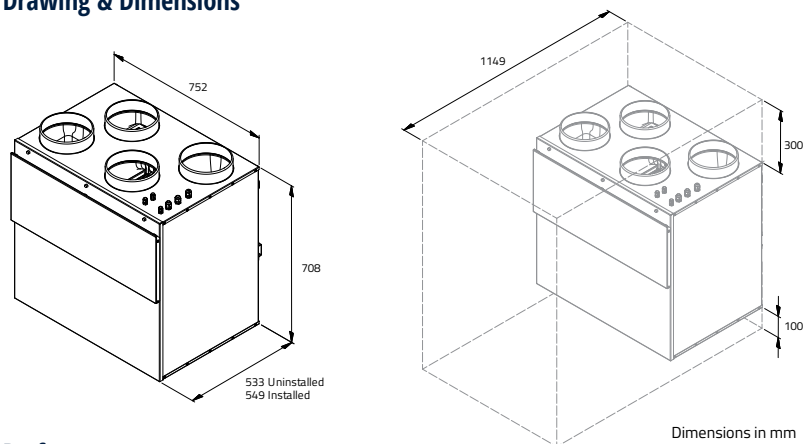
**Electrical:** 230V ~ 50/60Hz, 5A fuse.

**Installation:** To be installed accordance with the relevant and applicable building regulations.

**Maintenance:** Service and filter clean/replacement subject to local environment - see product manual.

**Acoustics:** Full acoustic data available online [www.titon.com/acoustics](http://www.titon.com/acoustics).

## Drawing & Dimensions



Dimensions in mm

## Performance

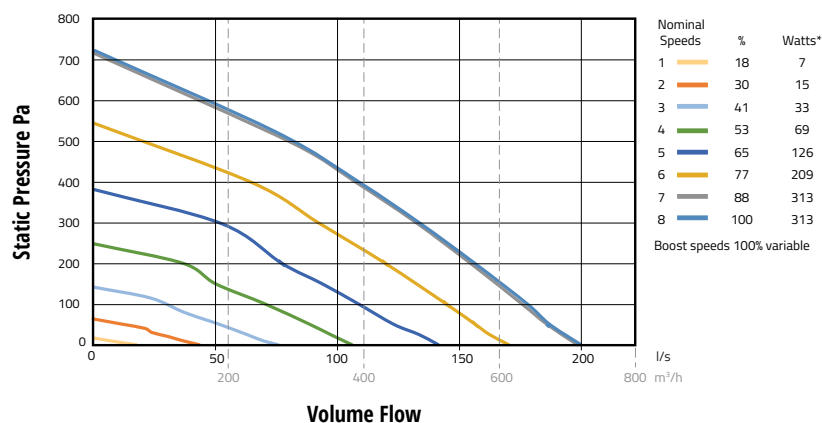
The figures and compliance levels below relate to current SAP requirements. Revised SAP guidance will have an effect on performance and up-to-date figures can be found on the relevant product page at [www.titon.com](http://www.titon.com).

Exhaust terminal configuration*	Fan speed setting	2009		2012	
		SFP (W/l/s)	Heat exchange efficiency (%)	SFP (W/l/s)	Heat exchange efficiency (%)
Kitchen + 1 additional wet room	100% variable	0.52	92%	0.52	91%
Kitchen + 2 additional wet rooms	100% variable	0.48	91%	0.53	91%
Kitchen + 3 additional wet rooms	100% variable	0.48	91%	0.58	90%
Kitchen + 4 additional wet rooms	100% variable	0.53	90%	0.68	90%
Kitchen + 5 additional wet rooms	100% variable	0.58	90%	0.79	89%
Kitchen + 6 additional wet rooms	100% variable	0.66	90%	0.95	89%
Kitchen + 7 additional wet rooms	100% variable	0.76	89%	1.15	88%

Figures taken from the BRE Test Results.

\*Number of wet rooms is based on SAP Q test criteria and does not correlate directly with regulatory performance requirements.

## Nominal Fan Performance



\*@FID (0 Pa)

100% variable speed control. Performance curves for Eco version.

## Acoustic Data

Product	% of Max flow	Airflow	dB(A) @ 3m Hemispherical			dB(A) @ 3m Spherical
			Induct Inlet	Induct Outlet	Casing Breakout	Casing Breakout
HRV20 HE Q Plus	41%	65l/s @ 18Pa	33	43	27	24
	65%	116l/s @ 51Pa	46	58	42	39
	100%	170l/s @ 100Pa	57	70	49	46

For full frequency acoustic data at various speeds please see [www.titon.com](http://www.titon.com). All acoustic data is third party tested at Sound Research Laboratories (SRL) Ltd.