

# SM\_AT(8) DIGITAL INVERTER



Toshiba Digital Inverter brings state-of-the-art inverter technology to the commercial sector, offering considerable advantages in terms of capacity, energy savings, optimised control, lower refrigerant charge and utilising one of the smallest physical dimensions and lightest range of outdoor units in the industry.

### Light and compact

- With Capacity outputs up to 12.8kW in a package that is only 890mm high and 69Kg in weight make this model an ideal solution, where space is limited.

### Wide adaptability

- Compatible with a wide choice of indoor units: 4 way cassette, 4 way compact cassette, slim duct, standard duct, high wall and ceiling.
- Night time operation mode reduces the noise output of the system down to as low as 33dB (A).

### Efficiency & energy savings

- Toshiba's inverter drive technology ensures maximum system efficiencies and performance, by matching precisely the operation of the compressor to the indoor demand load.
- Power limitation by 1% step between 50% and 100% load.

### Easy to maintain

- Removable corner panels for easy access.
- Auto diagnostic function.

SCOP MAX



4.51

CAPACITY



2.5kW > 16kW

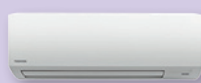
OPERATION



-15°C > +46°C

Toshiba state of the art compressor features a powerful magnetic rotor with great surface area to increase efficiency and reduce the operation noise.

- > Efficiency
- > Reliability
- > 100% Toshiba



CASSETTE

DUCTED

HIGH WALL

CEILING

RAV-RM\_UTP-E/TR  
RAV-RM\_MUT-E/TR

RAV-RM\_BTP-E/E1/TR  
RAV-RM\_SDT-E/TR

RAV-SM\_KRTP-E/TR  
RAV-SM\_KRT-E/TR

RAV-RM\_CTP-E/TR



OUTDOOR UNITS

RAV-SM304ATP-E/TR  
RAV-SM404ATP-E/TR  
RAV-SM564ATP-E/TR  
RAV-SM804ATP-E/TR

RAV-SM1104AT-E/TR  
RAV-SM1404AT-E/TR  
RAV-SM1104AT8-E/TR  
RAV-SM1404AT8-E/TR

RAV-SM1603AT-E1

SM\_AT8

# BIG DIGITAL INVERTER



**Big DI has been designed to provide a high capacity output from a very small foot print.**

### High efficiency and energy savings

- Best EER and COP in its class incorporating Toshiba's exclusive Inverter twin-rotary compressor made in Japan.
- Compliant with ERP directive lot 21.
- Top class part load efficiency.

### Wide adaptability

- Allows connection of four indoor units (same type and capacity) to one outdoor unit.
- Compatible with a wide choice of indoor units: 4-way cassette, 4-way compact cassette, slim duct, standard duct, high-wall and ceiling.

### Safe and reliable

- Built-in leak detection system.
- Compliant with the child finger entrapment regulation.

SCOP MAX



3.51

CAPACITY



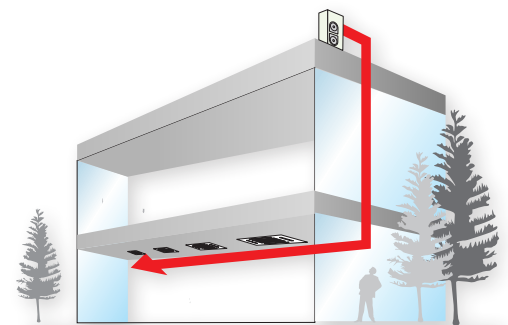
19kW > 27kW

OPERATION



-27°C > +52°C

Installation can reach up to 100m total piping length and 30m in elevation.



INDOOR UNITS

RAV-SM\_DTP-E/TR



OUTDOOR UNITS

RAV-SM2246AT8-E/TR  
RAV-SM2806AT8-E/TR

**DIGITAL INVERTER Physical data outdoor - 1Ph**

Outdoor unit	RAV-SM304ATP-E/TR    RAV-SM404ATP-E/TR    RAV-SM564ATP-E/TR    RAV-SM804ATP-E/TR    RAV-SM1104ATP-E/TR    RAV-SM1404ATP-E/TR    RAV-SM1603AT-E1							
		1 HP	1.5 HP	2 HP	3 HP	4 HP	5 HP	6 HP
Air flow	m <sup>3</sup> /h - l/s	1800 - 500	2200 - 611	2400 - 667	2700 - 750	4080 - 1133	4200 - 1167	6180 - 1717
Sound pressure level	dB(A) C	46	49	46	48	53	54	51
Sound power level	dB(A) C	61	64	63	65	70	70	68
Operating range	°C C	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 46	-15 / 43
Sound pressure level	dB(A) H	47	50	48	52	54	55	53
Sound power level	dB(A) H	62	65	65	69	71	71	70
Operating range	°C H	-15 / 24	-15 / 24	-15 / 15	-15 / 15	-15 / 15	-15 / 15	-15 / 15
Dimensions (HxWxD)	mm	550x780x290	550x780x290	550x780x290	550x780x290	890x900x320	890x900x320	1340x900x320
Weight	kg	33	39	40	44	68	68	99
Compressor type		DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary
Flare connections								
Gas	in	3/8	1/2	1/2	5/8	5/8	5/8	5/8
Liquid	in	1/4	1/4	1/4	3/8	3/8	3/8	3/8
Minimum pipe length	m	2	2	5	5	5	5	5
Maximum pipe length	m	20	20	30	30	50	50	50
Maximum height difference	m	10	10	30	30	30	30	30
Chargeless pipe length	m	15	15	20	20	30	30	30
Refrigerant charge (R410A)	kg	0.94	1.65	1.3	2.01	3.3	3.3	3.3
Power supply	V-ph-Hz	220/240-1-50/60	220/240-1-50/60	220/240-1-50/60	220/240-1-50/60	220/240-1-50/60	220/240-1-50/60	220/240-1-50/60

**DIGITAL INVERTER Physical data outdoor - 3Ph**

Outdoor unit	RAV-SM1104AT8P-E/TR		RAV-SM1404AT8P-E/TR	
		4 HP		5 HP
Air flow	m <sup>3</sup> /h - l/s	4080 - 1133		4200 - 1167
Sound pressure level	dB(A) C	53		54
Sound power level	dB(A) C	70		70
Operating range	°C C	-15 / 46		-15 / 46
Sound pressure level	dB(A) H	54		55
Sound power level	dB(A) H	71		71
Operating range	°C H	-15 / 15		-15 / 15
Dimensions (HxWxD)	mm	890x900x320		890x900x320
Weight	kg	69		69
Compressor type		DC Twin Rotary		DC Twin Rotary
Flare connections				
Gas	in	5/8		5/8
Liquid	in	3/8		3/8
Minimum pipe length	m	5		5
Maximum pipe length	m	50		50
Maximum height difference	m	30		30
Chargeless pipe length	m	30		30
Refrigerant charge (R410A)	kg	3.3		3.3
Power supply	V-ph-Hz	380/415-3-50, 380-3-60		380/415-3-50, 380-3-60

C: cooling mode  
H: heating mode

**BIG DIGITAL INVERTER** Physical data outdoor - 3Ph

Outdoor Unit			RAV-SM2246AT8-E/TR	RAV-SM2806AT8-E/TR
			8 HP	10 HP
Air flow	m <sup>3</sup> /h - l/s		9180 - 2550	10920 - 3033
Sound pressure level	dB(A)	C	58	61
Sound power level	dB(A)	C	76	78
Operating range	°C	C	-15 / 52	-15 / 52
Sound pressure level	dB(A)	H	60	63
Sound power level	dB(A)	H	76	80
Operating range	°C	H	-27 / 15	-27 / 15
Dimensions (HxWxD)	mm		1550x1100x370	1550x1100x370
Weight	kg		142	142
Compressor type			DC Twin Rotary	DC Twin Rotary
Pipe connections				
Gas	in		1 1/8	1 1/8
Liquid	in		1/2	1/2
Minimum pipe length	m		5	5
Maximum pipe length	m		100	100
Maximum height difference	m		30	30
Chargeless pipe length	m		30	30
Refrigerant charge (R410A)	kg		6.96	6.96
Power supply	V-ph-Hz		380/415-3N-50	380/415-3N-50

C: cooling mode  
Ht: heating mode