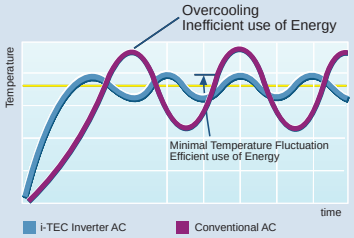
The DC Inverter AC

i-TEC, the DC INVERTER air conditioner (Cooling type), an air conditioner which is made in India and made for India. It combines 8 Direct Efficient Technologies that are packed into its compact and stylish indoor unit, ensuring energy saving and ultimate comfort.

WHY HITACHI i-TEC?

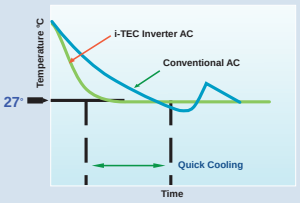
Optimum Power Saving

i-TEC with 8 DC motors reduces power consumption by 30%, in comparison with a 5 star rated AC.



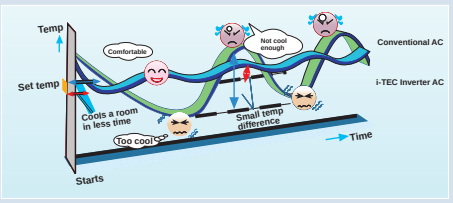
Faster Cooling

Hitachi i-TEC Inverter uses its full capacity (High RPM) at start up to quickly reach the desired temperature so that you can cool your room faster.



Undisturbed Comfort

The Direct Efficient Technology in i-TEC adjusts the compressor speed and refrigerant flow to maintain the desired temperature to give you undisturbed comfort.



Tropical Twin Rotary Compressor

Hitachi's DC Twin Rotary Compressor features a 'Permanent magnet' motor to magnetise without electricity. As a result, Hitachi's DC compressor delivers over 10% greater efficiency than conventional AC Compressors.

- **Tropical Inverter Compressor** withstands up to 52°C
- **Low Vibration** – 30% less compared to conventional ACs
- **Overhead Temperature Sensor** to measure the compressor's top temperature based on variation of load.

IQ Engine

Information from 5 in-built sensors (2 in the IDU & 3 in the ODU) is processed which results in 4000 times per second check of the operating conditions.

Power Active Module

The Power Active Module inverter system suppresses electrical distortion to minimise power losses. This is the combination of PWM (Pulse Width Modulation) & PAM (Pulse Amplitude Modulation).

- Minimises the phase gap
- Draws more effective power
- Patented by Hitachi

Pulse Amplitude Modulation (PAM)

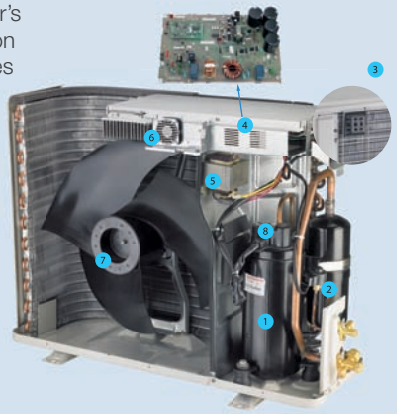
The ODU controller in i-TEC runs on PAM technology which reaches the desired temperature quickly by increasing the compressor frequency.

Pulse Width Modulation (PWM)

When the desired temperature has been reached, the ODU controller uses PWM to adjust compressor rotation speed to efficiently maintain the desired temperature without any disturbance or any extra power consumption.

Intelligent Outdoor Unit

1. **DC Twin Rotary Compressor** ensures a well balanced, smoother rotation which minimises noise and improves efficiency.
2. **Electronic Expansion Valve** ensures refrigerant flow as per the prevailing heat load.
3. **Outdoor Temperature Sensor** measures outdoor temperature and gives feedback to the ODU controller about variation of outdoor ambient temperature.
4. **ODU Controller** controls each & every activity of the AC.
5. **Reactor** helps to store charge in case of voltage fluctuations in the range of +/-15% (195 ~ 265VAC) and also works for electrical noise filteration.
6. **ODU Controller Cooling DC Fan** ensures smooth and effective working of the ODU controller.
7. **ODU DC Fan Motor** is far more efficient than the conventional AC technology and reduces noise and power consumption significantly.
8. **Compressor Overhead Temperature Sensor** measures the compessor's top temperature based on variation of load and gives feedback to the ODU controller to maintan discharge temperature and refrigerant flow.



TECHNICAL SPECIFICATIONS

Description	Unit	i-TEC
Tonnage Class	Tr.	1.5
Star Rating	No. of BEE Stars	# Not Applicable
Unit	Model Number	RAU018EQE
IDU	Model Number	RAS018EQE
ODU	Model Number	RAC018EQE
Compressor	Type	DC Twin Rotary
Rated Cooling Capacity	BTU/Hr	18200
Rated Cooling Capacity	Watts	5333
Rated Power Supply	Volts/Hz/Phase	230/50/1
Total Power Input	Watts	1520
EER	Rated Cooling Capacity (BTU/Hr) / Power Input (Watts)	12.0
COP	Rated Cooling Capacity (Watts) / Power Input (Watts)	3.51
Current Drawn	Amps	6.7
Fan Speed	Steps	3
Air Flow (IDU) (Super High)	CFM	590
Sound Level* (IDU)	dB	34
Dimension (IDU) (W X H X D)	mm	050 X 290 X 220
Dimenison (ODU) (W X H X D)	mm	792 X 600 X 299
Net Weight (IDU)	kg	13.5
Net Weight (ODU)	kg	41.5
Remocon	Type	Wireless LCD

TECHNICAL SPECIFICATION - i-TEC

Description	Unit	i-TEC
Maximum Cooling Capacity	BTU/Hr	20600
Minimum Cooling Capacity		8100
Maximum Cooling Capacity	Watts	6036
Minimum Cooling Capacity		2373
Maximum Power Input	Watts	1850
Minimum Power Input		530
Maximum Cooling -	Max. Cooling Capacity (BTU/Hr) /Max. Power Input (Watts)	11.1
EER	Min. Cooling Capacity (BTU/Hr) /Min. Power Input (Watts)	15.3
Maximum Cooling -	Max. Cooling Capacity (Watts) / Max. Power Input (Watts)	3.26
COP	Min. Cooling Capacity (Watts) / Min. Power Input (Watts)	4.48
Current Drawn - Maximum Capacity	Amps	8.12
Current Drawn - Minimum Capacity		2.96

Features may vary from model to model.

*At Super silent mode & at a distance of 1m.

Hitachi air conditioners are designed to work in ambient temperatures up to 52°C.

Due to continuous research & development, specifications & features may change without prior notice.

#BEE star rating scheme does not cover testing of these models.