

# INVERTER HI-WALL



Ultra Fresh  
Filter



Low Noise  
Level



8°C Heating  
Mode

## YUKAI

YUKAI is a silent solution that uses the new Toshiba Inverter and compressor technologies with R32 to offer A++ cooling and heating performances, leading to true energy savings and year-round comfort.



## FEATURES

-  Ultra-Fresh filter captures up to 85% of PM2.5 creating healthy living spaces at home.
-  Ultra-quiet system down to 19dB(A) - indoor
-  Silent operation down to 42dB(A) - outdoor
-  Wi Fi Ready
-  High Power Extra airflow to rapidly reach your desired temperature setting
-  Self-cleaning function when shutdown the unit automatically starts the Self-Cleaning operation, the louver opens slightly. The indoor unit fan operates continuously
-  Fix & Swing. Select your optimum airflow from a range of Fixed and Swing louver positions
-  Silent CDU #1 & #2. Toshiba's unique noise reduction function of outdoor unit for your neighborhood comfort

## TECHNICAL CHARACTERISTICS

### PERFORMANCE DATA

#### OUTDOOR UNIT INDOOR UNIT

|                                      |       |   | RAS-10E2AVG-E<br>RAS-B10E2KVG-E | RAS-13E2AVG-E<br>RAS-B13E2KVG-E | RAS-16E2AVG-E<br>RAS-B16E2KVG-E | RAS-18E2AVG-E<br>RAS-18E2KVG-E | RAS-24E2AVG-E<br>RAS-24E2KVG-E |
|--------------------------------------|-------|---|---------------------------------|---------------------------------|---------------------------------|--------------------------------|--------------------------------|
| Cooling capacity                     | kW    |   | 2,5                             | 3,3                             | 4,2                             | 5,0                            | 6,5                            |
| Cooling capacity                     | BTU/h |   | 8.530                           | 11.260                          | 14.331                          | 17.061                         | 22.179                         |
| Cooling range (min. - max.)          | kW    |   | 0,80 - 3,00                     | 1,20 - 3,60                     | 1,40 - 4,70                     | 1,45 - 5,50                    | 1,70 - 7,20                    |
| Cooling range (min. - max.)          | BTU/h |   | 2.730 - 10.236                  | 4.095 - 12.284                  | 4.777 - 16.037                  | 4.948 - 18.767                 | 5.801 - 24.567                 |
| Power input<br>(min. -rated - max.)  | kW    | C | 0,20 - 0,70 - 1,00              | 0,25 - 1,10 - 1,25              | 0,34 - 1,27 - 1,60              | 0,34 - 1,50 - 1,80             | 0,41 - 2,25 - 2,60             |
| EER                                  | W/W   |   | 3,57                            | 3,00                            | 3,31                            | 3,33                           | 2,89                           |
| SEER                                 |       |   | 7,0                             | 7,0                             | 7,0                             | 7,0                            | 6,9                            |
| Energy efficiency class              |       | C | A++                             | A++                             | A++                             | A++                            | A++                            |
| Seasonal electricity<br>consumption  | kWh/a | C | 125                             | 165                             | 210                             | 250                            | 330                            |
| Heating capacity                     | kW    |   | 3,2                             | 3,6                             | 5,0                             | 5,4                            | 7,0                            |
| Heating capacity                     | BTU/h |   | 10.919                          | 12.284                          | 17.061                          | 18.426                         | 23.885                         |
| Heating range (min. - max.)          | kW    |   | 0,95 - 3,90                     | 0,97 - 4,50                     | 1,30 - 6,00                     | 1,35 - 6,00                    | 1,50 - 8,10                    |
| Heating range (min. - max.)          | BTU/h |   | 3.242 - 13.307                  | 3.110 - 15.355                  | 4.436 - 20.473                  | 4.606 - 20.473                 | 5.118 - 27.638                 |
| Power input<br>(min. -rated - max.)  | kW    | H | 0,18 - 0,86 - 1,11              | 0,18 - 0,92 - 1,25              | 0,24 - 1,34 - 1,70              | 0,26 - 1,50 - 1,80             | 0,29 - 2,10 - 2,55             |
| COP                                  | W/W   |   | 3,72                            | 3,91                            | 3,73                            | 3,60                           | 3,33                           |
| SCOP (Average)                       |       |   | 4,6                             | 4,6                             | 4,6                             | 4,4                            | 4,3                            |
| Energy efficiency class<br>(Average) |       | H | A++                             | A++                             | A++                             | A+                             | A+                             |
| SCOP (Warmer)                        |       |   | 5,38                            | 5,40                            | 5,57                            | 5,62                           | 5,35                           |
| Energy efficiency class<br>(Warmer)  |       | H | A+++                            | A+++                            | A+++                            | A+++                           | A+++                           |
| Seasonal electricity<br>consumption  | kWh/a | H | 730                             | 822                             | 1095                            | 1209                           | 1757                           |

### PHYSICAL DATA INDOOR

#### INDOOR UNIT

|                            |            |   | RAS-B10E2KVG-E  | RAS-B13J2KVS-G-E | RAS-B16E2KVG-E  | RAS-18E2KVG-E   | RAS-24E2KVG-E |
|----------------------------|------------|---|-----------------|------------------|-----------------|-----------------|---------------|
| Air Flow (h)               | m³/h - l/s | C | 510 - 142       | 540 - 152        | 750 - 208       | 790 - 222       | 1070 - 298    |
| Air Flow (l)               | m³/h - l/s | C | 233 - 64        | 259 - 72         | 330 - 92        | 480 - 133       | 666 - 185     |
| Sound pressure level (h/q) | dB(A)      | C | 39/19           | 41/20            | 43/21           | 47/26           | 48/29         |
| Sound power level (h)      | dB(A)      | C | 52              | 54               | 56              | 60              | 61            |
| Air Flow (h)               | m³/h - l/s | H | 510 - 144       | 560 - 158        | 760 - 213       | 840 - 233       | 860 - 234     |
| Air Flow (l)               | m³/h - l/s | H | 233 - 64        | 271 - 75         | 340 - 94        | 500 - 139       | 730 - 203     |
| Sound pressure level (h/q) | dB(A)      | H | 39/20           | 42/20            | 43/22           | 48/26           | 48/29         |
| Sound power level (h)      | dB(A)      | H | 52              | 55               | 56              | 61              | 61            |
| Dimensions (HxWxD)         | mm         |   | 288 x 770 x 225 | 288 x 770 x 225  | 293 x 798 x 230 | 293 x 798 x 230 | 320x1050x250  |
| Weight                     | kg         |   | 9               | 9                | 9               | 9               | 15            |

### PHYSICAL DATA OUTDOOR

#### OUTDOOR UNIT

|                                        |            |   | RAS-10E2AVG-E   | RAS-13E2AVG-E   | RAS-16E2AVG-E | RAS-18E2AVG-E | RAS-24E2AVG-E  |
|----------------------------------------|------------|---|-----------------|-----------------|---------------|---------------|----------------|
| Air Flow (max)                         | m³/h - l/s | C | 1800 - 500      | 1980 - 550      | 2160 - 600    | 2160 - 600    | 2220 - 617     |
| Sound pressure level (h)               | dB(A)      | C | 47              | 48              | 50            | 50            | 54             |
| Sound pressure level<br>(Silent CDU#2) | dB(A)      | C | 43              | 43              | 43            | 44            | 49             |
| Sound power level (h)                  | dB(A)      | C | 60              | 61              | 63            | 63            | 67             |
| Sound power level (Silent<br>CDU#2)    | dB(A)      | C | 56              | 56              | 56            | 57            | 62             |
| Operating range                        | °C         | C | -15 ~ 46        | -15 ~ 46        | -15 ~ 46      | -15 ~ 46      | -15 ~ 46       |
| Air Flow (max)                         | m³/h - l/s | H | 1800 - 500      | 1980 - 550      | 2160 - 600    | 2160 - 600    | 2220 - 617     |
| Sound pressure level (h)               | dB(A)      | H | 49              | 49              | 51            | 51            | 54             |
| Sound pressure level<br>(Silent CDU#2) | dB(A)      | H | 43              | 43              | 46            | 46            | 49             |
| Sound power level (h)                  | dB(A)      | H | 62              | 62              | 64            | 64            | 67             |
| Sound power level (Silent<br>CDU#2)    | dB(A)      | H | 56              | 56              | 59            | 59            | 62             |
| Operating range                        | °C         | H | -15 ~ 24        | -15 ~ 24        | -15~24        | -15~24        | -15~24         |
| Dimensions (HxWxD)                     | mm         |   | 530 x 660 x 240 | 530 x 660 x 240 | 550x780x290   | 550x780x290   | 550x780x290    |
| Weight                                 | kg         |   | 22              | 22              | 30            | 34            | 38             |
| Compressor type                        |            |   | DC Rotary       | DC Rotary       | DC Rotary     | DC Rotary     | DC Twin Rotary |
| Flare connections<br>(gas-liquid)      |            |   | 3/8" - 1/4"     | 3/8" - 1/4"     | 1/2" - 1/4"   | 1/2" - 1/4"   | 1/2" - 1/4"    |
| Minimum pipe length                    | m          |   | 2               | 2               | 2             | 2             | 2              |
| Maximum pipe length                    | m          |   | 15              | 15              | 20            | 20            | 20             |
| Maximum height difference              | m          |   | 12              | 12              | 12            | 12            | 12             |
| Chargeless pipe length                 | m          |   | 15              | 15              | 15            | 15            | 15             |
| Refrigerant charging (R32)             | kg         |   | 0,49            | 0,54            | 0,68          | 0,93          | 1,18           |
| Power supply                           | V-ph-Hz    |   | 220-240/1/50    | 220-240/1/50    | 220-240/1/50  | 220-240/1/50  | 220-240/1/50   |

