

# Residential & Light Commercial Heat Pump System

**TOSHIBA**  
*Carrier*

Indoor Model: RAV-SM122KRTP-UL  
Outdoor Model: RAV-SP122AT2P-UL

## Submittal Data

Job Name \_\_\_\_\_ Location \_\_\_\_\_  
Tag \_\_\_\_\_



A220922

### OUTDOOR UNIT STANDARD FEATURES

- Digital inverter compressor technology
- System can operate in cooling only mode with heating locked out
- Line lengths up to 164 ft
- Low-ambient cooling down to 5°F
- System diagnostics

OUTDOOR UNIT MODEL		RAV-SP122AT2P-UL
SYSTEM PERFORMANCE		
Nominal Cooling Capacity†	Btu/h	12,000
SEER		25.2
EER		15.6
Nominal Heating Capacity†	Btu/h	14,000
HSPF		10.6
COP		13.0
REFRIGERANT LINES		
Total Piping Length	ft	164
Vertical Lift	ft	98
Suction Line Size	in	1/2
Liquid Line Size	in	1/4
AMBIENT OPERATING RANGE		
Cooling DB Min ~ Max	F	5~115
Heating DB Min ~ Max	F	-13~59
REFRIGERANT		R410A
FACTORY CHARGE	lbs	3.8

AIRFLOW		
Cooling	CFM	1590
Heating	CFM	1590
SOUND PRESSURE LEVEL		
Cooling	db(A)	48
Heating	db(A)	52
ELECTRICAL		
Power Supply	V/Ph/Hz	208-230/1/60
Minimum Circuit Amps (MCA)	A	14
Recommended Fuse Size	A	15
Maximum Over Current Protection (MOCP)	A	25
PHYSICAL DATA		
Unit Width	in	30-3/4
Unit Height	in	21-3/4
Unit Length	in	11-3/8
Unit Weight - Net / Gross	lbs	99 / 106

### Legend

**db** — Dry Bulb  
**SEER** — Seasonal Energy Efficiency Ratio  
**HSPF** — Heating Seasonal Performance Factor  
**wb** — Wet Bulb

†Rated per AHRI (Air-Conditioning, Heating and Refrigeration Institute) 210/240 Standard.  
Cooling: Indoor 80°F (27°C) db/67°F (20°C) wb; Outdoor 95°F (35°C) db  
Heating: Indoor 70°F (21°C) db; Outdoor 47°F (8°C) db/43°F (6°C) wb



A221021

#### RAV-SM122KRTP-UL HIGH WALL FEATURES

- R-410A refrigerant
- Five sizes from 12,000 to 36,000 Btu/h
- Quiet operation (as low as 28 dBA)
- Auto or manually set three fan speeds
- Easy to remove cleanable filter

INDOOR UNIT MODEL		RAV-SM122KRTP-UL
PERFORMANCE		
Cooling Rated Capacity	Btu/h	12,000
Heating Rated Capacity	Btu/h	14,000
Fan Type (Qty)		Turbo (1)
Airflow (H/M/L)	CFM	477/355/250
Sound Pressure (H/M/L)	dBA	37/33/28
ELECTRICAL		
Power Supply	V/Ph/Hz	From ODU
FILTER		
Type		Washable
Quantity		2
MERV Corresponding Value		5
Dimensions (W x L x D)	in.	15-3/4 x 16-3/8 x 1/16

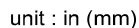
PHYSICAL DATA		
Pipe Connection Size - Liquid (High Pressure)	in	1/4 (Flare)
Pipe Connection Size - Gas (Low Pressure)	in	1/2 (Flare)
Condensate Drain Connection	in	7-8
External Finish		Munsell 2.5GY9.0/0.5
Unit Width	in	41-3/8
Unit Height	in	12-5/8
Unit Depth	in	9-7/8
Unit Net Weight	lb	33
MOTOR		
Motor Type		DC
Motor Watts	W	30

#### ACCESSORIES

- ☐ Wired Remote Controller (7-Day Programmable) RBC-AMS54E-UL
- ☐ Simple Wired Remote Controller RBC-AS41UL
- ☐ Remote Sensor TCB-TC41LUL
- ☐ Wired Remote Controller RBC-AMT32UL
- ☐ Condensate Drain Pipe Kit 53DS-900---118

## DIMENSIONAL DRAWING

### OUTDOOR UNIT RAV-SP122AT2P-UL



A220924



Technical drawings of the SM12 to SM24 indoor unit, showing dimensions in inches (") and millimeters (mm).

**Top View:**

- Overall width: 41.3" (1050)
- Overall height: 12.6" (320)
- Labels: Front Panel, Grille Inlet, Air Inlet, Air Filter, Heat Exchanger, Air Outlet.
- Knock Out System details:
  - Front Panel: 2.9" (73.5) height, 2.0" (50) width, 0.3" (8) depth.
  - Side Panel: 9.8" (250) height, 2.9" (73.5) height, 2.0" (50) width, 0.3" (8) depth.

**Side View:**

- Overall height: 2.0" (50)
- Overall width: 2.0" (50)
- Internal components: 2.8" (71.5) width, 2.0" (50) height.

**Front View:**

- Overall width: 20.7" (525)
- Overall height: 12.6" (320)
- Labels: Installation plate hanger, Drain hose 15.8" (400), Refrigerant pipe connecting port (Gas side), Refrigerant pipe connecting port (Liquid side).
- Refrigerant pipe connecting port (Gas side):
  - For SM12 to SM18: Ø1/2" (12.7)
  - For SM24: Ø5/8" (15.9)
- Refrigerant pipe connecting port (Liquid side):
  - For SM12 to SM18: Ø1/4" (6.4)
  - For SM24: Ø3/8" (9.5)

**Bottom View:**

- Overall width: 30.9" (786)
- Overall height: 12.6" (320)
- Labels: Hanger, Center line, Outline of indoor unit.
- Dimensions:
  - Top: 3.3" (85), 9.3" (235), 9.3" (235), 0.9" (23)
  - Bottom: 1.9" (47), 8.5" (215.5), 10.3" (262.5), 10.3" (262.5), 6.0" (153.5), 4.3" (109)
  - Internal: 8.5" (215), 8.5" (215)
  - Side: 1.6" (40), 1.6" (40)

**Wireless remote controller:**

- Overall height: 6.8" (172)
- Overall width: 2.3" (58)
- Internal: 0.7" (19)

**Remote controller holder:**

- Overall height: 5.9" (149)
- Overall width: 2.5" (63)
- Internal: 0.9" (17.5)

unit : in (mm)



ETL LISTED CM