

PIONEER®

QUANTUM Ultra™

# Ceiling Cassette Ductless Split Systems

19~20 SEER Ultra High Efficiency

Heat Pump + DC Inverter in One System

Single Zone (36,000~48,000 BTU/hr)

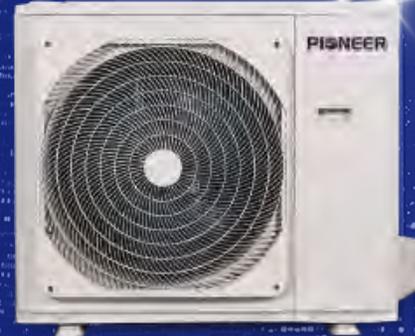
208V~230V, 60Hz, 1Ph

Wireless Access Via Free Smartphone App



CYB-20

DC INVERTER HEAT PUMP



INVERTER++  
TECHNOLOGY

R454b

Smart  
Airflow

High  
Efficiency

Insulated  
DESIGN

Cloud  
Connected

DUAL  
DRAINAGE

Low Noise

WORKS  
WITH

- amazon alexa
- Google Assistant
- Siri



Whisper-Quiet Operation    Dual Drain Options    LED Display    Convenient Maintenance    Eco-Friendly Refrigerant    Customizable Timer    Soft Breeze Airflow    3D Air Flow    Ultra-Thin Design    Power Loss Memory Recovery    Rapid Delivery Output    Energy Saving    Wireless Control

## STANDARD FEATURES

- Designed for Furred In, Flush to Ceiling Installation
- Cooling Only or Heat Pump Applications
- Ultra Slim Fully Cased Compact Cabinet Design
- Knockout Plates for Remote Ducted Drop Addition
- Full Galvanized Heavy Steel Casing for Indoor Units
- Newest 8-Way Air Discharge Louver Technology
- Digital LCD Screen Wireless Remote Controller
- Ultra-Quiet Air Delivery with High Performance
- Variable Speed ECM Indoor Fan Motors
- Heavy Gauge Closed Cell External Rubber Installation
- Auto-Restart with Memory for Power Outages
- Timer for Preset Starting and Stopping
- Auto Changeover, Dry, and Fan Only Modes
- Season Sensitive Operational Logic
- Self-Learning Time-Demand Defrost
- Automatic Swing Directional Louvers
- Three + Auto Speed PSC Blower Motor
- Digital Motor Speed Control System
- Whisper Quiet Indoor Motor with Ball Bearings
- High Air Flow Volume for Quick Performance
- Ultra High Efficiency Grooved Copper Tubes
- Enhanced Louvered Hydrophilic Aluminum Fins
- Latest Technologies in DC Inverter Driver System
- Dynamically Balanced Ultra Quiet Scirocco Blowers
- Anti-Mildew Treatment on Blower Wheels
- Superior Energy Efficiency and Performance
- Fully Variable Speed Compressors for All Models
- Fully Charged with Environmentally Friendly R454B Gas
- Precision Controlled Compressor and Fan Motors
- Ultra-Galvanized Sheet Metal Parts
- Heavy Coat of Baked Enamel Paint for the Outdoor Unit
- Durable Outdoor Fan with High Glass Content
- Extra Durable, Permanently Lubricated Outdoor Motor
- Internal Overload Protection for Motors
- Flare Type Refrigerant Connections
- Full Operating Charge of Refrigerant
- Standardized Cabinet Design for All Models
- Easy Access for Piping and Wiring Connections
- Highest Grade Components for Long Life Expectancy
- Ample Availability of Spare Parts and Accessories

Full System Model Number		CYB036GMSI20RL		CYB048GMSI20RL	
	Indoor Unit Model Number	CB036GMSILDHFG		CB048GMSILDHFG	
	Indoor Unit Model Code	22022511004516		22022511004496	
	Outdoor Unit Model Number	YN036GMSI20RUG		YN048GMSI20RUG	
	Outdoor Unit Model Code	22022516002464		22022516002442	
System Type		QUANTUM ULTRA Series Ceiling Cassette Type Split Heat Pump System			
Modes		Cooling, Heating, Dehumidification, Ventilation			
Control type		Standard set with IR wireless remote (Other optional controllers are available)			
Input power supply		208~230V~/60Hz/1P		208~230V~/60Hz/1P	
Power supply range		187~253 VAC		187~253 VAC	
Energy Star Rating		x		x	
NEEP Rating		✓		✓	
Cooling performance	Rated cooling capacity (at 95°F)	Btu/h	36,000	48,000	
	Cooling capacity range	Btu/h	6,400~39,800	10,600~50,400	
	EER2 Rating	Btu/W.h	9.6	9.5	
	SEER2 Rating	Btu/W.h	20.0	19.0	
Heating performance	Rated Heating capacity (at 47°F)	Btu/h	38,000	50,000	
	Rated Heating capacity (at 17°F)	Btu/h	26,800	36,600	
	Heating capacity range	Btu/h	14,400~42,200	19,900~61,700	
	HSPF2 Rating (Region IV)	Btu/W.h	10.3	9.9	
	HSPF2 Rating (Region V)	Btu/W.h	7.9	7.7	
	COP2 (at 47°F)	W/W	3.31	2.96	
	Max. Heating capacity (at 5°F)	Btu/h	26,600	40,500	
	Performance percentage		70%	81%	
	COP2 (at 5°F)	W/W	2.2	2.11	
	Max. Heating capacity (at -4°F)	Btu/h	20,800	32,100	
Rated power consumption	Cooling	W	3,720	5,053	
	Heating	W	3,365	4,950	
Rated power current	Cooling	A	16.4	22.5	
	Heating	A	15.0	22.1	
Min. circuit ampacity		A	33	39	
Max. circuit breaker		A	35	40	
Moisture removal		Pint/day	210	315	
Refrigerant and room size specifications	Type	R454b (A2L rated refrigerant with a lower GWP rating of 466)			
	Amount	Ozs	91.7	127.0	
	Sufficiency for max line set length	Ft	25	25	
	Adjustment amount per feet	Ozs	0.32	0.32	
	Recommended room size	Sq.Ft	1,000~1,400	1,400~1,800	
	Refrigerant leakage detector module			Standard / Assembled in indoor unit	
	Minimum room size (unit height 6')	SqF	103	143	
Air volume and sound level	Turbo/High/Med/Low/Mute	CFM	1,042/948/853/753/689	1,236/1,124/1,018/800/689	
		dB(A)	54/52/47/40/36	56/52/50/42/38	
Outdoor sound		dB(A)	63	64	
Connecting pipe	Gas	In (OD)	3/4"	3/4"	
	Liquid	In (OD)	3/8"	3/8"	
	Accessory line set length available	Feet	10' / 16' / 25' / 33' / 50' (can be further extended using coupling kits). Both Standard copper and fully flexible sets are available		
	Maximum allowable length	Feet	250		
	Maximum allowable vertical run	Feet	100		
Indoor unit dimensions and weight	Net unit dimensions (WxDxH)	Inch	32"-5/8 x 32"-5/8 x 9"-5/8	32"-5/8 x 32"-5/8 x 11"-3/8	
	Carton box dimensions (WxDxH)	Inch	35"-7/8 x 35"-7/8 x 11"-3/8	35"-7/8 x 35"-7/8 x 13"	
	Shipping factor		0.00427	0.00481	
	Net unit weight	Lbs	59.3	64.5	
	Shipping weight	Lbs	71.5	76.1	
Panel Grill dimensions and weight	Net unit dimensions (WxDxH)	Inch	37"-3/8 x 37"-3/8 x 2"-1/8	37"-3/8 x 37"-3/8 x 2"-1/8	
	Carton box dimensions (WxDxH)	Inch	40"-3/4 x 40"-3/4 x 3"-1/2	40"-3/4 x 40"-3/4 x 3"-1/2	
	Net unit weight	Lbs	13.2	13.2	
	Shipping weight	Lbs	19.8	19.8	
Outdoor unit dimensions and weight	Net unit dimensions (WxDxH)	Inch	37"-1/4 x 16"-1/4 x 31"-7/8	37"-1/2 x 16"-3/8 x 52"-1/2	
	Carton box dimensions (WxDxH)	Inch	42"-7/8 x 19"-5/8 x 34"-7/8	43"-1/8 x 19"-1/2 x 57"-1/2	
	Shipping factor		0.00725	0.02083	
	Net unit weight	Lbs	152.4	208.8	
	Shipping weight	Lbs	162.5	239.8	
Connecting cable			AWG #16 x 4 Core TC-ER cable		
Temperature setting range		°F	62 ~ 86		
Working ambient temperature range for cooling		°F	5 ~ 131		
Temperature setting range for heating		°F	-13 ~ 86		

Rated cooling performance data is based on standard ARI conditions of 80°F-DB/67°F-WB Indoor and 95°F Outdoor ambient conditions. Rated heating performance data is based on standard ARI conditions of 70°F-DB/60°F-WB Indoor and 47°F Outdoor ambient conditions. Variable speed inverter systems adjust their output capacity automatically based on actual indoor and outdoor temperatures, thermostat settings and other heating or cooling loads. Capacity of the system output and related power input will vary based on these conditions. System contains A2L refrigerant and the minimal room size data must be strictly adhered to for any standard installation to avoid fire risk. This data assumes the indoor unit installation height of minimum 6 feet from the floor level. Lower levels require larger min. room sizes. Specifications and data listed herein are subject to change without notice due to constant product and engineering improvements. Always refer to the equipment nameplate for applicable exact information.