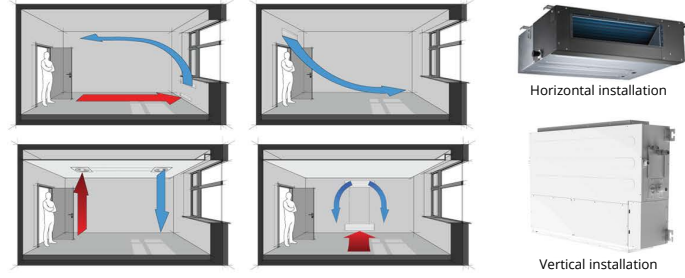


Flexible Installation

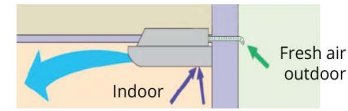
Choose between horizontal and vertical* installation.



* - option is available only for 24K, 36K, and 48K indoor models

Fresh Air Function

The fresh air function improves the quality of the indoor air, making it healthy and comfortable.



A ventilation motor (provided by the installer) can be used inside the fresh air duct to improve the fresh air volume. There are reserved ports for this motor on the main PCB.

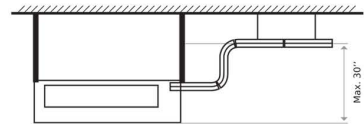


Built-in Water Pump



Built-in drain pump can lift the water up to 30".

Drainage piping is convenient to install in the most hard-to-reach locations.



The pump must be disabled when the unit is installed vertically or the pump assembly is removed from its original position.

Wired Control Connection & Wifi

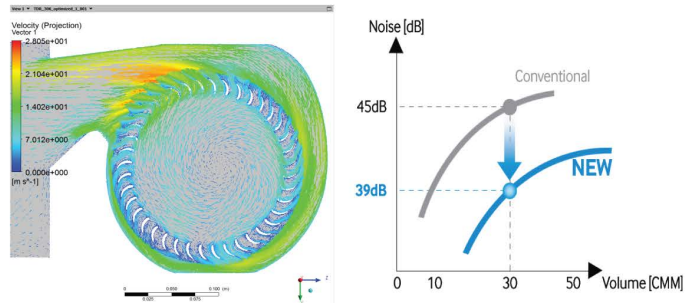


The seven-day programmable wired remote control (6.5-ft connection wire is included) allows you to set the on/off time three times a day. In addition, the auto re-start/reset function will automatically restart the unit in the case of a power failure. The remote control signal receiver box should be fixed outside of the unit. It can also be connected with various WiFi smart air conditioner remote controls, purchased separately.



Lower Noise

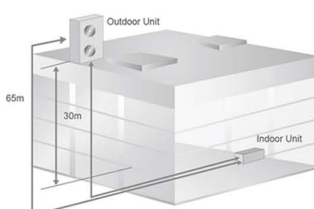
Designed based on aerothermodynamics, the blower wheel and volute casing of the new ducted air conditioner has been improved dramatically, ensuring excellent performance, high efficiency at low airflow, and reduced noise by 4-6dB(A).



Higher Pipe Limits

Slim duct units are a great solution for buildings with soffit ceilings as well as areas that require short duct runs.

They can also be installed in bedrooms, offices, renovations, or new construction projects. Usually air ducts should be kept within certain limits to avoid noise, unacceptable friction loss, and energy consumption. However, thanks to increased pipe limits, the installation of Cooper&Hunter duct systems is even more flexible than before.



Size	9K	12K	18K	24K	36K	48K
Max. pipe length (ft)	82	82	98	164	213	213
Max. height difference (ft)	33	33	66	66	98	98

Multi-Channel Air Distribution

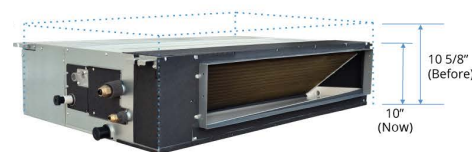
Air intake is from the back (standard) and the bottom (optional). The size of the plate from the bottom and the flange from the back is the same. The installer can more easily change the air intake from the back to the bottom.



Slim Design

The industry lowest height is designed to be fitted into tight roof spaces.

24K/36K BTU - 10"
48K BTU - 11.81"
60K BTU - 17"



Connectivity for Multi Combinations

Based on your specific needs, requirements, and situation, Cooper&Hunter duct systems can either be paired with a single outdoor unit from the Sophia Series, connected to a multi-zone outdoor unit, or, in the case of a large duct system, connected to a Light Commercial outdoor unit. To determine the best choice for your home, you will have to Consider a few factors, like the size of your room, the feasibility of installation, the cost, and many others. You will also need to determine if any of your choices fit the specific situations in which a single-zone or multi-zone unit might work best.

	Multi DC Outdoor Unit	Two Units	Three Units	Four Units	Five Units	
1 drive 2	CH-18MSPH230VO CH-HYP19MSPH230VO	9+9 9+12 12+12				
	1 drive 3	CH-28MSPH230VO CH-HYP28MSPH230VO	9+12 9+18 12+12 12+18 18+18	9+9+9 9+9+12 9+9+18 9+12+12 12+12+12		
		1 drive 4	CH-36MSPH230VO CH-HYP36MSPH230VO	9+18 9+24 9+30 9+36 12+12 12+18 12+24 12+30 18+18 18+24	9+9+9 9+9+12 9+9+18 9+9+24 9+9+30 9+12+12 9+12+18 9+12+24 9+18+18 12+12+12 12+12+18	9+9+9+9 9+9+9+12 9+9+9+18 9+9+9+24 9+9+9+30
1 drive 5			CH-48MSPH230VO CH-HYP48MSPH230VO	9+24 9+30 9+36 12+24 12+30 12+36 18+18 18+24 18+30 18+36 24+24 24+30 24+36	9+9+24 9+9+30 9+9+36 9+12+24 9+12+30 9+12+36 9+18+18 9+18+24 9+18+30 9+18+36 9+24+24 9+24+30 12+12+12 12+12+18 12+12+24 12+12+30 12+12+36 12+18+18 12+18+24 12+18+30 12+24+24 18+18+18 18+18+24	9+9+9+9 9+9+9+12 9+9+9+18 9+9+9+24 9+9+9+30 9+9+12+12 9+9+12+18 9+9+12+24 9+9+18+18 9+9+18+24 9+9+18+30 9+12+12+12 9+12+12+18 9+12+12+24 9+12+12+30 9+12+18+18 9+12+18+24 9+12+18+30 9+12+24+24 9+12+18+18

Note:

- If total load of indoor units exceeds nominal capacity of outdoor unit, the practical output capacity of every indoor unit will be attenuated correspondingly. This is most evident in heating mode.
- Outdoor Unit Capacity 0.66 <= Indoor Unit Capacity <= Outdoor Unit Capacity 1.33
- All outdoor unit specs are based on maximum number of zones with 9K Btu/h units.

Duct Air Conditioners



Single Zone | Multi Zone | Light Commercial

Your actual Multi-Room Inverter Heat Pump system and related devices may differ from images shown in this specification sheet. Test conditions are based on AHRI 210/240. Specifications are subject to change without notice. Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without incurring obligations. © 02.2021 All rights reserved.

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Single Zone



INDOOR UNIT		CH-M09DTUI	CH-M12DTUI	CH-M18DTUI	CH-M24DTUI
Power Supply	V-Hz-Ph	208-230V / 60Hz/1Ph	208-230V / 60Hz/1Ph	208-230V / 60Hz/1Ph	208-230V / 60Hz/1Ph
Cooling Capacity	Btu/h	9,000	12,000	18,000	24,000
Minimum Circuit Ampacity (MCA)	A	1.1	1.1	1.2	1.5
MAX. FUSE	A	15	15	15	15
Air Flow (Hi/Mi/Lo)	CFM	353/283/177	353/283/177	530/450/371	776/694/435
Noise Level (Hi/Mi/Lo)	dB(A)	38/35/32	38/36/33.5	39/37/35	44/41/38
Unit Dimension (WxDxH)	in	27.6x19.9x7.9	27.6x19.9x7.9	34.7x26.5x8.3	43.3x30.5x9.8
Packing Dimension (WxDxH)	in	33.9x21.3x11.2	33.9x21.3x11.2	42.1x28.5x10.6	51.4x31.7x12
Net/Gross Weight	lb	37.5/48.3	37.5/48.3	52.5/65	86.9/103
Design pressure	PSIG	550/340	550/340	550/340	550/340
Room Temperature	F°	62-90/32-86	62-90/32-86	62-90/32-86	62-90/32-86
Liquid side/ Gas side	in	1/4" - 3/8"	1/4" - 1/2"	1/4" - 1/2"	3/8" - 5/8"

SOPHIA SERIES OUTDOOR UNIT		CH-09SPH-230VO	CH-12SPH-230VO	CH-18SPH-230VO	CH-24SPH-230VO	
Power supply	V-Hz-Ph	208-230V/60Hz/1Ph	208-230V/60Hz/1Ph	208-230V/60Hz/1Ph	208-230V/60Hz/1Ph	
Cooling	Capacity	9,000	12,000	18,000	24,000	
	EER	13.5	12.5	12.5	12.5	
	SEER	20.5	21.5	19	21.5	
Heating	Capacity	10,000	12,000	18,000	24,000	
	COP	3.37	3.29	3.14	3.52	
	HSPF4	11.5	11.5	10.5	11	
	HSPF5	10	9	9	9.5	
	Minimum Circuit Ampacity (MCA)	A	10	12	15	18
MAX. FUSE	A	15	15	20	25	
Air Flow (max)	CFM	1,177	1,177	1,470	2,237	
Noise Level	dB(A)	55	55	60	61	
Unit Dimension (WxDxH)	in	30.3x11.8x21.9	31.5x13.1x21.8	33.3x14.3x27.6	37.2/16.1/31.9	
Packing Dimension (WxDxH)	in	35.4x13.6x23	36.2x15.4x24.2	38x15.6x29.7	42.9x19.7x34.5	
Net/Gross weight	lb	61.7/66.8	76.7/82.7	106.9/112.4	136.9/148.6	
Refrigerant type/Quantity	oz	R410A/38.8	R410A/40.6	R410A/68.8	R410A/82.9	
Refrigerant precharge (Total pipe length)	ft	25	25	25	25	
Additional charge for each ft	oz	0.16	0.16	0.16	0.32	
Design pressure	PSIG	550/340	550/340	550/340	550/340	
Refrigerant piping	Liquid side/Gas side	in	1/4" - 3/8"	1/4" - 1/2"	1/4" - 1/2"	
	Max. refrigerant pipe length	ft	82	82	98	164
	Max. difference in level	ft	33	33	66	82
Ambient temperature	cooling	F°	-13-122	-13-122	-13-122	
	heating	F°	-13-86	-13-86	-13-86	-13-86

HYPER SERIES OUTDOOR UNIT		CH-HYP09SPH-230VO	CH-HYP12SPH-230VO	CH-HYP18SPH-230VO	CH-HYP24SPH-230VO	
Power supply	V-Hz-Ph	208-230V/60Hz/1Ph	208-230V/60Hz/1Ph	208-230V/60Hz/1Ph	208-230V/60Hz/1Ph	
Cooling	Capacity	9,000	12,000	16,500	24,000	
	EER	13.5	12.5	12.5	12.5	
	SEER	23	20.5	19.6	20.5	
Heating	Capacity	10,000	12,000	19,000	24,000	
	COP	3.6	3.3	2.93	3.81	
	HSPF4	12	11	11	12.5	
	HSPF5	10	9.5	9.3	10.6	
	Minimum Circuit Ampacity (MCA)	A	9	9	18	20
MAX. FUSE	A	15	15	25	30	
Air Flow (max)	CFM	1,120	1,180	1,355	2,354	
Noise Level	dB(A)	59	57	59	61	
Unit Dimension (WxDxH)	in	31.5x13.1x21.8	31.5x13.1x21.8	33.3x14.3x27.6	37.2x16.1x31.9	
Packing Dimension (WxDxH)	in	36.2x15.4x24.2	36.2x15.4x24.2	38x15.6x30.1	42.9x19.7x34.5	
Net/Gross weight	lb	88.2/93.7	88.2/93.7	107.4/115.1	135.6/148.8	
Refrigerant type/Quantity	oz	R410A/52.9	R410A/52.9	R410A/68.8	R410A/91.7	
Refrigerant precharge (Total pipe length)	ft	25	25	25	25	
Additional charge for each ft	oz	0.16	0.16	0.16	0.32	
Design pressure	PSIG	550/340	550/340	550/340	550/340	
Refrigerant piping	Liquid side/Gas side	in	1/4" - 3/8"	1/4" - 1/2"	1/4" - 1/2"	
	Max. refrigerant pipe length	ft	82	82	98	164
	Max. difference in level	ft	33	33	66	82
Ambient temperature	cooling	F°	-22-122	-22-122	-22-122	
	heating	F°	-22-86	-22-86	-22-86	-22-86



Single Zone Light Commercial

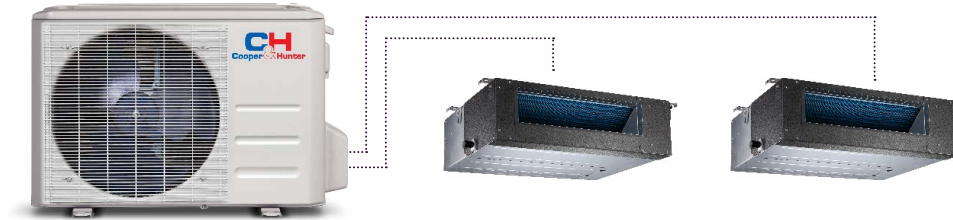


INDOOR UNIT		CH-M24DTUI	CH-36LCDTUI	CH-48LCDTUI	CH-60LCDTUI
Power Supply	V-Hz-Ph	208-230V / 60Hz/1Ph	208-230V / 60Hz/1Ph	208-230V / 60Hz/1Ph	208-230V / 60Hz/1Ph
Cooling Capacity	Btu/h	24,000	36,000	48,000	57,000
Minimum Circuit Ampacity (MCA)	A	1.5	1.5	1.5	5
MAX. FUSE	A	15	15	15	15
Air Flow (Hi/Mi/Lo) (No duct)	CFM	776/694/435	1,082/912/703	1,229/1,032/715	2,157/1,710/1,262
Noise Level (Hi/Mi/Lo)	dB(A)	44/41/38	45.5/42/39	50.5/47/43	50.5/47/43
Unit Dimension (WxDxH)	in	43.3x30.5x9.8	53.5x30.5x9.8	47.2x34.4x11.8	55.1x33.8x17.3
Packing Dimension (WxDxH)	in	51.4x31.7x12	61.8x31.7x12	55.3x36x14	63.2x35.8x19.9
Net/Gross Weight	lb	86.9/103	106.5/122.4	119.7/141.8	163.1/189.6
Design pressure	PSIG	550/340	550/340	550/340	550/340
Room Temperature	F°	62-90/32-86	62-90/32-86	62-90/32-86	62-90/32-86
Liquid side/ Gas side	in	3/8" - 5/8"	3/8" - 5/8"	3/8" - 5/8"	3/8" - 3/4"

LIGHT COMMERCIAL SERIES OUTDOOR UNIT		CH-24LCUO	CH-36LCUO	CH-HYP36LCUO	CH-HYP48LCUO	CH-48LCUO	CH-60LCUO
Power supply	V-Hz-Ph	208-230V/60Hz/1Ph	208-230V/60Hz/1Ph	208-230V/60Hz/1Ph	208-230V/60Hz/1Ph	208-230V/60Hz/1Ph	208-230V/60Hz/1Ph
Cooling	Capacity	Btu/h	24,000	36,000	36,000	48,000	57,000
	EER	Btu	12.5	9	9	8.7	9.2
	SEER		20.5	16.5	16.5	16	17.4
Heating	Capacity	Btu/h	24,000	40,000	40,000	48,000	49,500
	COP		3.81	3.37	3.37	3.05	3.52
	HSPF4		12.5	11.5	11.5	11.1	10.3
	HSPF5		10.6	10	10	9.7	8.8
	Minimum Circuit Ampacity (MCA)	A	20	30	39	36.3	35
MAX. FUSE	A	30	50	50	50	50	
Air Flow (max)	CFM	2,354	2,530	4,470	4,470	4,470	
Noise Level	dB(A)	61	66	65	65	62.5	
Unit Dimension (WxDxH)	in	37.2x16.1x31.9	37.2x16.1x31.9	37.5x16.3x52.5	37.5x16.3x52.5	37.5x16.3x52.5	
Packing Dimension (WxDxH)	in	42.9x19.7x34.5	42.9x19.7x34.5	43.1x19.5x58.3	43.1x19.5x58.3	43.1x19.5x58.3	
Net/Gross weight	lb	135.6/148.8	148.6/160.9	222.3/248	227.1/255.7	217.4/246	
Refrigerant type/Quantity	oz	R410A/91.7	R410A/107.6	R410A/148	R410A/148	R410A/148.2	
Refrigerant precharge (Total pipe length)	ft	25	25	25	25	25	
Additional charge for each ft	oz	0.32	0.32	0.32	0.32	0.32	
Design pressure	PSIG	550/340	550/340	550/340	550/340	550/340	
Refrigerant piping	Liquid side/Gas side	in	3/8" - 5/8"	3/8" - 5/8"	3/8" - 5/8"	3/8" - 5/8"	
	Max. refrigerant pipe length	ft	164	213	213	213	
	Max. difference in level	ft	82	98	98	98	
Ambient temperature	cooling	F°	-22-122	5-122	-22-122	-22-122	
	heating	F°	-22-86	5-86	-22-86	-22-86	



Multi Zone



INDOOR UNIT		CH-M09DTUI	CH-M12DTUI	CH-M18DTUI	CH-M24DTUI
Power Supply	V-Hz-Ph	208-230V / 60Hz/1Ph	208-230V / 60Hz/1Ph	208-230V / 60Hz/1Ph	208-230V / 60Hz/1Ph
Cooling Capacity	Btu/h	9,000	12,000	18,000	24,000
Minimum Circuit Ampacity (MCA)	A	1.1	1.1	1.2	3
MAX. FUSE	A	15	15	15	15
Air Flow (Hi/Mi/Lo) (No duct)	CFM	353/283/177	353/283/177	530/450/371	776/694/435
Noise Level (Hi/Mi/Lo)	dB(A)	38/35/32	38/36/33.5	39/37/35	44/41/38
Unit Dimension (WxDxH)	in	27.6x19.9x7.9	27.6x19.9x7.9	34.7x26.5x8.3	43.3x30.5x9.8
Packing Dimension (WxDxH)	in	33.9x21.3x11.2	33.9x21.3x11.2	42.1x28.5x10.6	51.4x31.7x12
Net/Gross Weight	lb	37.5/48.3	37.5/48.3	52.5/65	86.9/103
Design pressure	PSIG	550/340	550/340	550/340	550/340
Room Temperature	F°	62-90/32-86	62-90/32-86	62-90/32-86	62-90/32-86
Liquid side/ Gas side	in	1/4" - 3/8"	1/4" - 1/2"	1/4" - 1/2"	3/8" - 5/8"

MULTI ZONE OUTDOOR UNIT		CH-18MSPH230VO	CH-28MSPH230VO	CH-36MSPH230VO	CH-48MSPH230VO
Power supply	V-Hz-Ph	208-230V/60Hz, 1Ph	208-230V/60Hz, 1Ph	208-230V/60Hz, 1Ph	208-230V/60Hz/1Ph
Cooling	Capacity	Btu/h	17,000	27,000	36,000
	EER	Btu	12.5	12	10.9
	SEER		21.3	22	22.5
Heating	Capacity	Btu/h	18,000	28,000	36,000
	COP		3.7	3.7	3.1
	HSPF4		10	9.8	10.3
	HSPF5		8.6	8	9
	Minimum Circuit Ampacity (MCA)	A	18	25	30
MAX. FUSE	A	25	35	45	
Air Flow (max)	CFM	1,390	2,130	2,130	
Noise Level	dB(A)	62.4	63.4	62.3	
Unit Dimension (WxDxH)	in	33.3x14.3x27.6	37.2x16.1x31.9	37.2x16.1x31.9	
Packing Dimension (WxDxH)	in	38x15.6x30.1	42.9x19.7x34.5	42.9x19.7x34.5	
Net/Gross weight	lb	105.8/114.6	149.9/160.9	156.5/167.6	
Refrigerant type/Quantity	oz	R410A/70.5	R410A/98.8	R410A/105.8	
Refrigerant precharge (Total pipe length)	ft	49	74	98	
Additional charge for each ft	oz	0.16	0.16	0.16	
Design pressure	PSIG	550/340	550/340	550/340	
Refrigerant piping	Liquid side/Gas side	in	2x (1/4" - 3/8")	3x (1/4" / 3/8")	
	Max. length for all rooms	ft	131	197	
	Max. length for one indoor unit	ft	82	98	
Ambient temperature	cooling	F°	-13-122	-13-122	
	heating	F°	-13-86	-13-86	

HYPER MULTI ZONE OUTDOOR UNIT		CH-HYP19MSPH230VO	CH-HYP28MSPH230VO	CH-HYP36MSPH230VO	CH-HYP48MSPH230VO
Power supply	V-Hz-Ph	208-230V/60Hz, 1Ph	208-230V/60Hz, 1Ph	208-230V/60Hz, 1Ph	208-230V/60Hz, 1Ph
Cooling	Capacity	Btu/h	19,000	28,000	36,000
	EER	Btu	12.5	13	13.5
	SEER		21.5	22	21.5
Heating	Capacity	Btu/h	20,000	28,000	36,000
	COP		3.4	3.5	3.8
	HSPF4		9.8	10.4	10.5
	HSPF5		8.5	9	8.8
	Minimum Circuit Ampacity (MCA)	A	25	30	35
MAX. FUSE	A	35	45	50	
Air Flow (max)	CFM	2,130	2,130	4,500	
Noise Level	dB(A)	63.4	62.3	64	
Unit Dimension (WxDxH)	in	37.2x16.1x31.9	37.2x16.1x31.9	37.5x16.3x52.5	
Packing Dimension (WxDxH)	in	42.9x19.7x34.8	42.9x19.7x34.8	43.1x19.5x58.3	
Net/Gross weight	lb	152.1/160.9	156.5/167.6	223.8/255.1	
Refrigerant type/Quantity	oz	R410A/98.8</			