

# Adatta Light

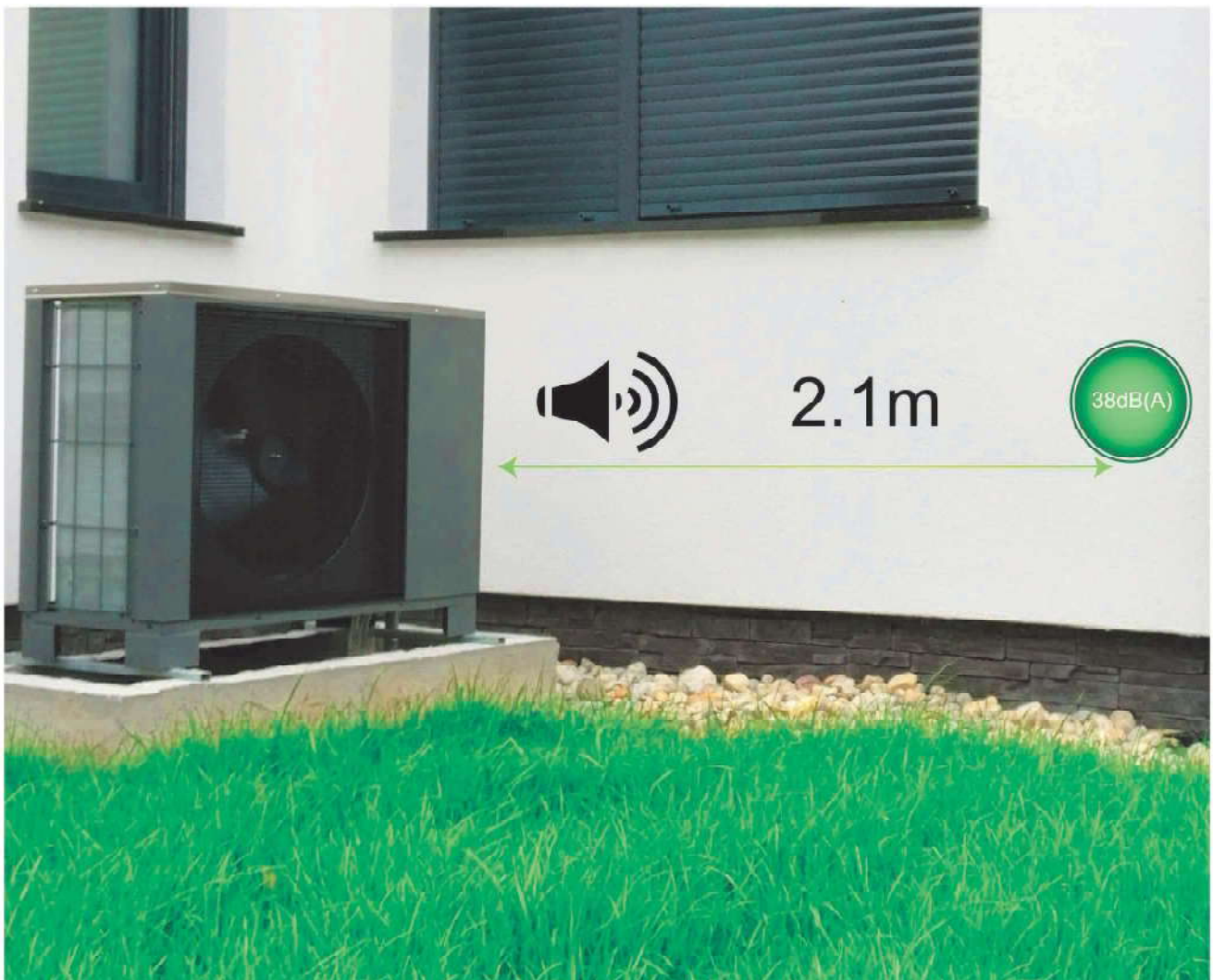
TWO-PIPE HEAT PUMPS

# DC inverter Air to Water Heat Pump

## Adatta Light

The new BIASI heat pumps has applied new gas solution of R32 in Adatta Light serie. The advantages are:

1. Compared to R410A refrigerant, the R32 heat pumps have a GWP of only one-third, so its environmental performance is even better.
2. High energy efficiency: It reaches A+++ energy level according to EU regulation. By making use of the heat in the outside air, you use much less energy while still enjoying a stable and pleasant level of comfort. Maintenance requirements are minimal making your running cost low. Thanks to the inverter technology, your energy savings are even greater.
3. EcoTouch operation panel: It has user friendly interface with powerful functions and can be intergrated with WIFI module.
4. Low noise level: By optimizing the air duct system, the sound power level can be as low as 52 dB(A). The sound pressure level reaches 38dB(A) at 2.1 meters.



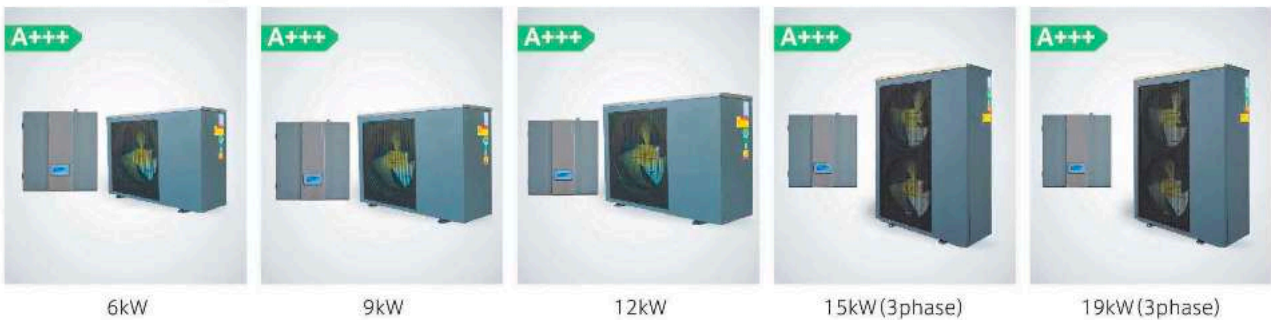


## Typologies

### Monoblock



### Monoblock Split (ORDERS from 2023)



### All-in-one (ORDERS from 2023)

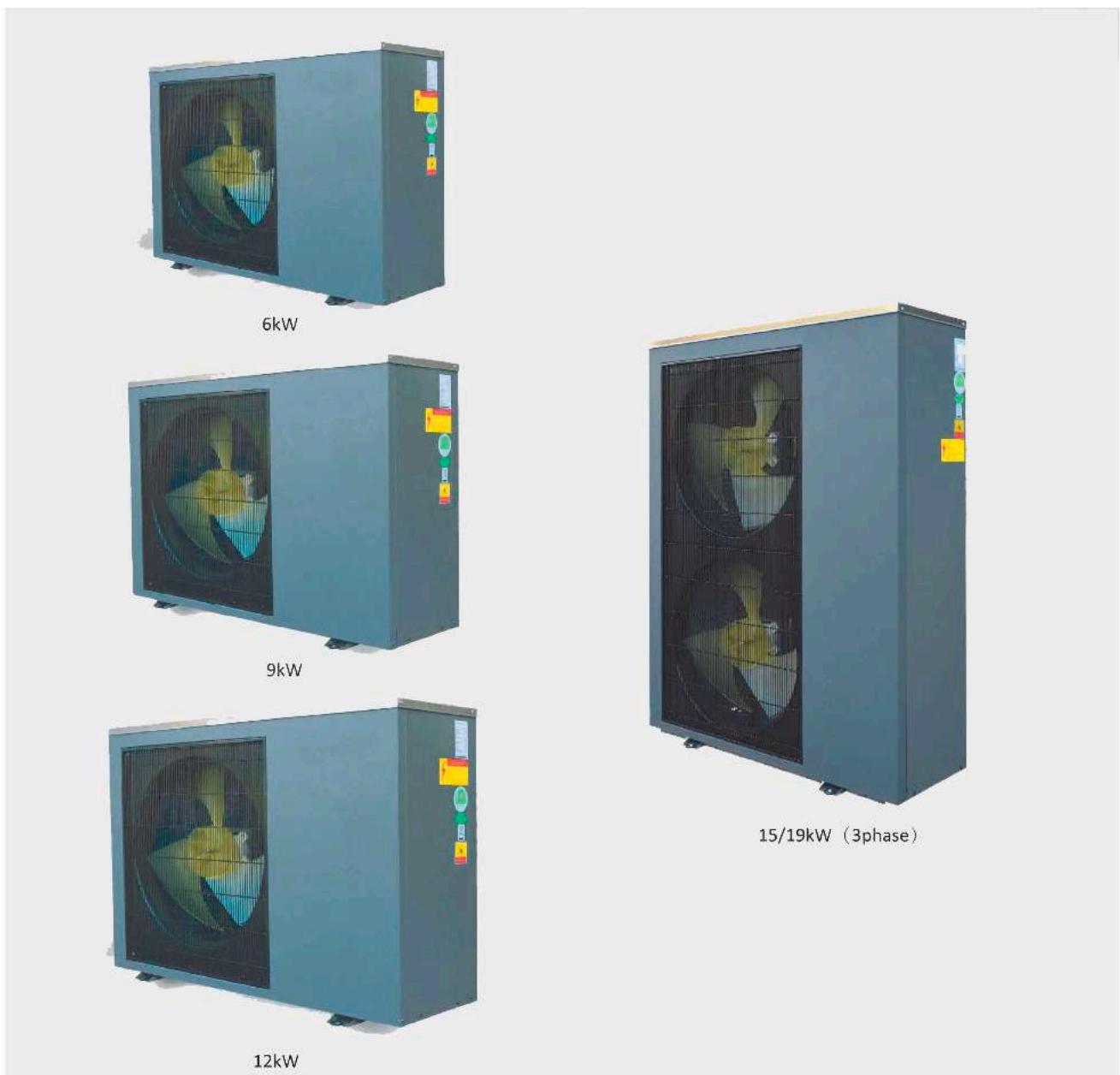


Note: Capacity mentioned here is for easy reference of the unit, rough values based on unit output at A7/W35 testing condition.

# DC inverter Air to Water Heat Pump

## Adatta Light - Monobloc (R32)

**Monoblock System:** As the name suggests, monoblock equipment are packaged equipment, where all components of the entire system is housed within a single piece of equipment. Monoblock equipment must be located outdoors. The advantages of the monoblock systems are: easy installation and no additional refrigerant piping requirement. It can be simply plumbed to your house's heating system using water connections. Amitec also offers a semi monoblock system, where only a small part of the hydrolic circuitry is separated from the main unit and just as full monoblock systems, requires only simple plumbing connections.





### ● Technical Data

Unit Name		ADATTA LIGHT 6M	ADATTA LIGHT 9M	ADATTA LIGHT 12M	ADATTA LIGHT 15M	ADATTA LIGHT 19M
Model		PAVH-06V1FBA	PAVH-09V1FBA	PAVH-12V1FBA	PAVH-15V4FBA	PAVH-19V4FBA
Power Supply / Refrigerant	V/Hz/Ph	220-240/50/1 - R32				
Max. Heating Capacity (1)	kW	6.5	9.2	11.6	15.35	18.5
C.O.P (1)	W/W	4.61	4.38	4.3	4.78	4.47
Heating Capacity Min./Max.(1)	kW	3.5 / 6.5	4.3/9.2	5.5 / 11.6	6/15.35	9.2/18.5
Heating Power Input Min./Max.(1)	W	758 / 1410	927/2097	1107 / 2683	1222/3209	1834/4142
C.O.P Min./Max.(1)	W/W	4.5 / 4.7	4.38/4.71	4.3 / 4.9	4.78/5.06	4.47/5.01
Max. Heating Capacity(2)	kW	6	8.6	11.2	14.26	18.2
C.O.P (2)	W/W	3.46	3.37	3.45	3.64	3.6
Heating Capacity Min./Max.(2)	kW	3.15 / 6	3.9/8.6	4.9 / 11.2	5.6/14.26	8.5/18.2
Heating power input Min./Max.(2)	W	943 / 1732	1162/2550	1401 / 3263	1551/3913	2248/4998
C.O.P Min./Max.(2)	W/W	3.34 / 3.56	3.37/3.58	3.3 / 3.5	3.64/3.82	3.6/3.82
Max. Cooling Capacity (3)	kW	7.45	9.5	9.8	18.57	22.5
E.E.R (3)	W/W	4.05	4.23	3.9	3.78	3.58
Cooling Capacity Min./Max.(3)	kW	6.22/7.45	6.7/9.5	7.2/9.8	7.23/18.57	8.5/22.5
Cooling Power Input Min./Max.(3)	W	1400/1863	1679/2242	1791/2510	1334/4917	1660/6285
E.E.R Min./Max.(3)	W/W	4.05/4.45	4.0/4.6	4.0/3.8	3.78/5.42	3.58/5.12
Max. Cooling Capacity (4)	kW	4.5	7.2	8.25	13	16
E.E.R (4)	W/W	2.7	2.8	2.9	2.96	2.85
Cooling Capacity Min./Max.(4)	kW	3.5/4.5	4.9/7.2	4.9 / 8.25	4.46/13	5.5/16
Cooling Power Input Min./Max.(4)	W	1330/1680	1451/2366	1358 / 2444	2592/4390	2970/5510
E.E.R Min./Max.(4)	W/W	2.5/2.74	2.8/3.1	2.6 / 3.5	2.96/3.29	2.85/3.2
Workable Ambient Temperature Range	°C	-25~43				
Min. System Water Temperature (Heating / Cooling)	°C	20 / 7				
Fuse of Circuit Board (Indoor / Outdoor PCB)		Indoor: 65TS/T15AL/250V; Outdoor: 65TS/T25AL/250V			Indoor: 65TS/T15AL/250V; Outdoor: 51NM/10A/250V	
Min. Floor Area for installation, operation and storage	m <sup>2</sup>	0.8	1.9	3.1	6.2	8
Min. Area of Pipe-work	m <sup>2</sup>	0.8	1.9	3.1	6.2	8
Max. Operation High Pressure	MPa	4.2				
Max. Operation Low Pressure	MPa	1.2				
Compressor	Type - Quantity/System	Twin Rotary - 1	Twin Rotary - 1	Twin Rotary - 1	Twin Rotary - 1	Twin Rotary - 1
Refrigerant	Type / Amount	- / kg	R32 / 0.9kg	R32 / 1.4kg	R32 / 1.8kg	R32 / 2.55kg
	Quantity		1	1	1	2
Fan	Airflow	m <sup>3</sup> /h	2500	3150	3150	6200
	Rated power	W	34	45	45	90
Noise Level (sound power)	Indoor/Outdoor	dB(A)	44/52	44/53	44/52	44/59
Water Side Heat Exchanger	Type	Plate Heat Exchanger				
	Water Pressure Drop	kPa	26	26	26	26
	Piping Connection	Inch	G1"	G1"	G1"	G1-1/4"
Allowable Water Flow	Min./Rated./Max.	L/S	0.21/0.29/0.35	0.26/0.43/0.52	0.34/0.57/0.68	0.43/0.71/0.85
Net Dimension(L×D×H)	Outdoor Unit	mm	1010x370x700	1165x370x845	1165x370x845	1085x390x1450
Net Weight	Outdoor Unit	Kg	65	78	85	120

Note: (1) Heating condition: water inlet/outlet temperature: 30°C/35°C, Ambient temperature: DB 7°C/WB 6°C;  
 (2) Heating condition: water inlet/outlet temperature: 40°C/45°C, Ambient temperature: DB 7°C/WB 6°C;  
 (3) Cooling condition: water inlet/outlet temperature: 23°C/18°C, Ambient temperature: DB 35°C/WB 24°C;  
 (4) Cooling condition: water inlet/outlet temperature: 12°C/7°C, Ambient temperature: DB 35°C/WB 24°C;  
 (5) The specifications are subject to change without prior notice. For actual specifications of unit, please refer to the stickers on the unit.

# DC inverter Air to Water Heat Pump

## Adatta Light - Monobloc Split (R32)

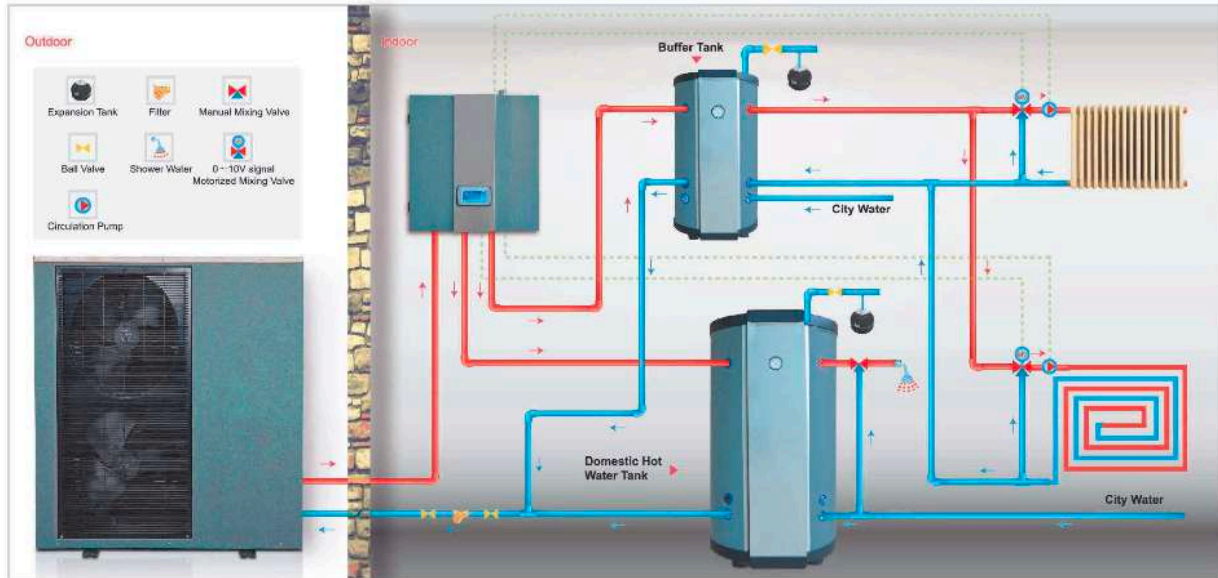
(ORDERS from 2023)

**Monobloc Split System:** As the name suggests, monobloc equipment are packaged equipment, where all components of the entire system is housed within a single piece of equipment. Monobloc equipment must be located outdoors. The advantages of the monobloc systems are: easy installation and no additional refrigerant piping requirement. It can be simply plumbed to your house's heating system using water connections. Biasi also offers a semi monobloc system, where only a small part of the hydrolic circuitry is separated from the main unit and just as full monobloc systems, requires only simple plumbing connections.





## Application



## Technical Data

Unit Name		ADATTA LIGHT 6S	ADATTA LIGHT 9S	ADATTA LIGHT 12S	ADATTA LIGHT 15S	ADATTA LIGHT 19S	
Model		PAVH-06V1FBA	PAVH-09V1FBA	PAVH-12V1FBA	PAVH-15V4FBA	PAVH-19V4FBA	
Power Supply / Refrigerant	V/Hz/Ph	220-240/50/1 - R32					
Max. Heating Capacity (1)	kW	6.5	9.2	11.6	15.35	18.5	
C.O.P (1)	W/W	4.61	4.38	4.3	4.78	4.47	
Heating Capacity Min./Max.(1)	kW	3.5 / 6.5	4.3/9.2	5.5 / 11.6	6/15.35	9.2/18.5	
Heating Power Input Min./Max.(1)	W	758 / 1410	927/2097	1107 / 2683	1222/3209	1834/4142	
C.O.P Min./Max.(1)	W/W	4.5 / 4.7	4.38/4.71	4.3 / 4.9	4.78/5.06	4.47/5.01	
Max. Heating Capacity(2)	kW	6	8.6	11.2	14.26	18.2	
C.O.P (2)	W/W	3.46	3.37	3.45	3.64	3.6	
Heating Capacity Min./Max.(2)	kW	3.15 / 6	3.9/8.6	4.9 / 11.2	5.6/14.26	8.5/18.2	
Heating power input Min./Max.(2)	W	943 / 1732	1162/2550	1401 / 3263	1551/3913	2248/4998	
C.O.P Min./Max.(2)	W/W	3.34 / 3.56	3.37/3.58	3.3 / 3.5	3.64/3.82	3.6/3.82	
Max. Cooling Capacity (3)	kW	7.45	9.5	9.8	18.57	22.5	
E.E.R (3)	W/W	4.05	4.23	3.9	3.78	3.58	
Cooling Capacity Min./Max.(3)	kW	6.22/7.45	6.7/9.5	7.2/9.8	7.23/18.57	8.5/22.5	
Cooling Power Input Min./Max.(3)	W	1400/1863	1679/2242	1791/2510	1334/4917	1660/6285	
E.E.R Min./Max.(3)	W/W	4.05/4.45	4.0/4.6	4.0/3.8	3.78/5.42	3.58/5.12	
Max. Cooling Capacity (4)	kW	4.5	7.2	8.25	13	16	
E.E.R (4)	W/W	2.7	2.8	2.9	2.96	2.85	
Cooling Capacity Min./Max.(4)	kW	3.5/4.5	4.9/7.2	4.9 / 8.25	4.46/13	5.5/16	
Cooling Power Input Min./Max.(4)	W	1330/1680	1451/2366	1358 / 2444	2592/4390	2970/5510	
E.E.R Min./Max.(4)	W/W	2.5/2.74	2.8/3.1	2.6 / 3.5	2.96/3.29	2.85/3.2	
Workable Ambient Temperature Range	°C	-25~43					
Min. System Water Temperature (Heating / Cooling)	°C	20 / 7					
Fuse of Circuit Board (Indoor / Outdoor PCB)		Indoor: 65TS/T15AL/250V; Outdoor: 65TS/T25AL/250V		Indoor: 65TS/T15AL/250V; Outdoor: 51NM/10A/250V			
Min. Floor Area for installation, operation and storage	m2	0.8	1.9	3.1	6.2	8	
Min. Area of Pipe-work	m2	0.8	1.9	3.1	6.2	8	
Max. Operation High Pressure	MPa	4.2					
Max. Operation Low Pressure	MPa	1.2					
Compressor	Type - Quantity/System	Twin Rotary - 1					
Refrigerant	Type / Amount	R32 / 0.9kg	R32 / 1.4kg	R32 / 1.8kg	R32 / 2.55kg	R32 / 2.6kg	
	Quantity	1	1	1	2	2	
Fan	Airflow	2500	3150	3150	6200	7000	
	Rated power	34	45	45	90	120	
Noise Level (sound power)	Indoor/Outdoor	44/52	44/53	44/52	44/59	44/61	
Water Side Heat Exchanger	Type	Plate Heat Exchanger					
	Water Pressure Drop	kPa	26	26	26	26	
	Piping Connection	Inch	G1"	G1"	G1"	G1-1/4"	
Allowable Water Flow	Min./Rated./Max.	L/S	0.21/0.29/0.35	0.26/0.43/0.52	0.34/0.57/0.68	0.43/0.71/0.85	0.55/0.92/1.1
Net Dimension(LxDxH)	Indoor Unit	mm	570x550x255	570x550x255	570x550x255	570x550x255	570x550x255
	Outdoor Unit	mm	1010x370x700	1165x370x845	1165x370x845	1085x390x1450	1085x390x1450
Net Weight	Indoor Unit	Kg	25	25	25	25	25
	Outdoor Unit	Kg	65	78	85	130	140

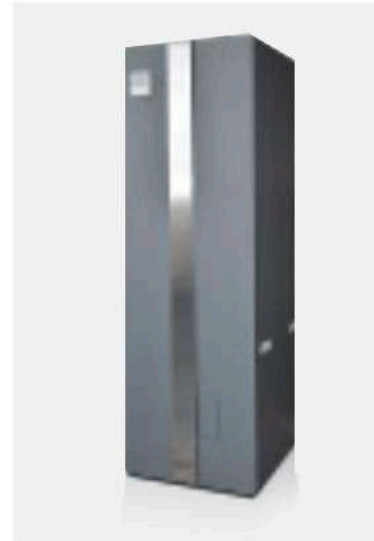
Note: (1) Heating condition: water inlet/outlet temperature: 30°C/35°C, Ambient temperature: DB 7°C/WB 6°C;  
 (2) Heating condition: water inlet/outlet temperature: 40°C/45°C, Ambient temperature: DB 7°C/WB 6°C;  
 (3) Cooling condition: water inlet/outlet temperature: 23°C/18°C, Ambient temperature: DB 35°C/WB 24°C;  
 (4) Cooling condition: water inlet/outlet temperature: 12°C/7°C, Ambient temperature: DB 35°C/WB 24°C;  
 (5) The specifications are subject to change without prior notice. For actual specifications of unit, please refer to the stickers on the unit.

# DC inverter Air to Water Heat Pump

## Adatta Light - All in One System

(ORDERS from 2023)

**All In One System:** are split systems combining a water tank in its indoor section. This structure minimizes the installation of a water tank in the house.



### ● Technical Data

Unit Name	ADATTA LIGHT 6A ADATTA LIGHT 9A ADATTA LIGHT 12A ADATTA LIGHT 15A ADATTA LIGHT 19A				
Model	PAVH-06V1FBA	PAVH-09V1FBA	PAVH-12V1FBA	PAVH-15V4FBA	PAVH-19V4FBA
Power Supply / Refrigerant	V/Hz/Ph		220-240/50/1 - R32		380-420/50/3 - R32
Max. Heating Capacity (1)	kW		6.5	9.2	11.6
C.O.P (1)	W/W		4.61	4.38	4.3
Heating Capacity Min./Max (1)	kW		3.5 / 6.5	4.3/9.2	5.5 / 11.6
Heating Power Input Min./Max.(1)	W		758 / 1410	927/2097	1107 / 2683
C.O.P Min./Max.(1)	W/W		4.5 / 4.7	4.38/4.71	4.3 / 4.9
Max. Heating Capacity(2)	kW		6	8.6	11.2
C.O.P (2)	W/W		3.46	3.37	3.45
Heating Capacity Min./Max (2)	kW		3.15 / 6	3.9/8.6	4.9 / 11.2
Heating power input Min./Max.(2)	W		943 / 1732	1162/2550	1401 / 3263
C.O.P Min./Max.(2)	W/W		3.34 / 3.56	3.37/3.58	3.3 / 3.5
Max. Cooling Capacity (3)	kW		7.45	9.5	9.8
E.E.R (3)	W/W		4.05	4.23	3.9
Cooling Capacity Min./Max.(3)	kW		6.22/7.45	6.7/9.5	7.2/9.8
Cooling Power Input Min./Max.(3)	W		1400/1863	1679/2242	1791/2510
E.E.R Min./Max.(3)	W/W		4.05/4.45	4.0/4.6	4.0/3.8
Max. Cooling Capacity (4)	kW		4.5	7.2	8.25
E.E.R (4)	W/W		2.7	2.8	2.9
Cooling Capacity Min./Max.(4)	kW		3.5/4.5	4.9/7.2	4.9 / 8.25
Cooling Power Input Min./Max.(4)	W		1330/1680	1451/2366	1358 / 2444
E.E.R Min./Max.(4)	W/W		2.5/2.74	2.8/3.1	2.6 / 3.5
Workable Ambient Temperature Range	C		-25~43		
Min. System Water Temperature (Heating / Cooling)	C		20 / 7		
Fuse of Circuit Board (Indoor / Outdoor PCB)			Indoor: 65TS/T15AL/250V; Outdoor: 65TS/T25AL/250V		Indoor: 65TS/T15AL/250V; Outdoor: 51NM/10A/250V
Min. Floor Area for installation, operation and storage	m2		0.8	1.9	3.1
Min. Area of Pipe-work	m2		0.8	1.9	3.1
Max. Operation High Pressure	MPa		4.2		
Max. Operation Low Pressure	MPa		1.2		
Compressor	Type - Quantity/System		Twin Rotary - 1		Twin Rotary - 1
Refrigerant	Type / Amount		R32 / 0.9kg		R32 / 1.4kg
					R32 / 1.8kg
					R32 / 2.55kg
					R32 / 2.6kg
Fan	Quantity		1		2
	Airflow		m <sup>3</sup> /h		2500
	Rated power		W		34
Noise Level	Indoor/Outdoor		dB(A)		44/52
Water Side	Type		Plate Heat Exchanger		
Heat Exchanger	Water Pressure Drop		kPa		
	Piping Connection		Inch		
			G1"		
			26		
			G1-1/4"		
Allowable Water Flow	Min./Rated./Max.		L/S		0.21/0.29/0.35
Net Dimension (LxDxH)	Indoor Unit		mm		600x650x1720
	Outdoor Unit		mm		1010x370x700
Net Weight	Indoor Unit		Kg		139
	Outdoor Unit		Kg		57







Adatta Light EN



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