# The Energy Solutions of Withair Full DC Inverter Ducted Split Air conditioning Catalogue 2017



## Withair offers a wide range of clean energy products and solutions to meet the needs of your projects.



Ongoing innovation with cutting-edge products



Over 20 years of experience



**Production 100% Made in China** 



**Guaranteed support and spare parts** 



**Support in design** 



**Documentation for incentives** 



Two-year guarantee



Free training course

#### **About Withair**

Withair® is one leading manufacturer in sustainable energy solutions supplying HVACR products & services for cooling, heating, hot water, ventilation, industrial refrigeration and heat recovery that reflect today's demand for sustainable construction, comfortable indoor climate and industrial cooling process application, and specialize in heating & cooling system, air quality system and new energy development and utilization, now it has three factories, manufacturing different kinds of products, and committed to providing the first-class products & system solutions for customers.

At Withair®, our aim is to support the growth, profit, and sustainability goals of our clients by delivering innovative solutions with n x value.we gain a deep understanding of our client's needs and business objectives first and foremost by gaining and leveraging our technical knowledge, innovative thinking, and vast equipment resources. from heating & cooling solutions and air quality management, to energy performance and efficiency determination, Withair® delivers the results.

Withair® operates in a strongly impacting sector in the energy field, and its primary objectives include committing resources to continuous technological research and improvement of production processes, with the aim of streamlining products and raise users' awareness on the actual soundness of ensuing energy savings.

Withair® products & solutions combine utmost efficiency with minimum energy consumption and strict respect of the environment, the idea proved to be a winning one in just a few years, Withair® became the leader in the sector!



Low energy consumption systems
Use of clean energy
Use of environmentally-friendly cooling gases
ZERO direct CO2 emissions in the environment

#### Full DC Inverter Type Ductable Split Air conditioning - Makes Indoor Air healthy and Comfortable

Withair® Full DC Inveter Type Ductable Split Air Conditioning systems offer superior performance, energy-efficiency, and comfort in stylish solutions conforming to all interior spaces and lifestyles. Inverter technology air conditioning compressors are driven by motor, and motor rotation speed depends on power supply frequency. An inverter modulates power supply frequency to control motor rotation speed. Inverters stabilize temperature by adjusting compressor operation according to load to eliminate waste and save energy. Even adopting an inverter to the fan motors of the indoor and outdoor units provides more precise control and contributes to energy savings.

Temperature control by inverter compressor, Indoor units operate quietly to meet individual temperature set points for each zone. Variable-speed compressors with wide capacity and precise modulation help maintain the temperature within a narrow range. Withair® inverter series duct split air conditioning involve a range of 5 models, with heating and cooling capacity among 1.5TR and 4TR, which allow to create "customized" solution, matching the different installations requests.

### Full DC Inverter Type Ductable Split Air conditioning





#### **Full DC Inverter Type Ductable Split Air conditioning**

#### — Product Description —

Withair® Full DC Inveter Type Ductable Split Air Conditioning is a very intelligent system with flexible capacity output. It could adjust cooling/heating capacity output automatically according to requirements. It is much more energy-saving with a long lifespan. The system offers flexible mounting options and versatile, high-efficiency heating and cooling for precise comfort with minimum ductwork.

Withair® Duct-free mini-split systems essentially eliminate energy losses that occurs when using ductwork used in conventional central systems. In general, duct losses may account for as much as 30% of energy consumption. In addition, variable-speed compressors in outdoor units provide extremely high part-load efficiency. They are an excellent choice for energy-conscious customers.

### — The Key Advantages Include —

- ECO friendly refrigerant R410A,R407C.
- Built-in hydraulic module for option.
- Intelligent defrost totally.
- Ultra Slim Design, only 290mm in height, save installation space.
- The independent design and manufacturing of high efficiency heat exchanger, strong energy saving and anti-freeing.
- Fresh air intake, fresh air makes indoor air healthy and comfortable; Long term filter.
- Electronic expansion valve throttle control, refrigerant flow control precision at at the cold temperature.
- Air side heat exchanger(hydrophilic aluminum fin) with anti-ice system design, prevent heat exchanger to frost at the cold temperature.
- Multi self-protection functions, such as: high & low pressure, high temperature, water flow and antifreeze protection.
- Modular networking technology, the operation of individual modules can be coordinated according demand.
- Advanced & world-famous inverter compressor high-efficiency, low-noise and low-vibration operation.
- Optional external static pressure(ESP): 50Pa and 80Pa can be freely chosen.
- Remote monitoring and control features enable the unit's operational schedule to be set via internet or phone.
- Using modular networking technology, the operation of individual modules can be coordinated according demand.
- Built-in water pump (optional), the built-in pump can lift condensing water up to 1200mm high from the drainage pan.
- Remote control, central control and WIFI control are for options.
- Flexible air intake options, air intake from rear as standard, from bottom is optional. The size of the plate from bottom is the same as the flange from back, which makes it convenient to change installation style due to different decoration requirements.
- Applicable to a variety of room types, specific ESP design can be applied to various room types easily, like rooms of L type or U type; the air outlet can be set separately from the indoor unit, so the air flow can be equally distributed even the room is in irregular structure.

#### — Technical Data ——

Model No.	Indoor unit		W01R-5IDN	W01R-7IDN	W01R-10IDN	W01R-15IDN	W01R-18IDN
	Outdoor unit		W01R-5IDW	W01R-7IDW	W01R-10IDW	W01R-15IDW	W01R-18IDW
Capacity	Cooling	kW	5.2(5.7~1.6)	7.3(8.0~2.2)	10.2(11.3~3.5)	14.5(15.8~4.9)	17.6(19.3~6.2)
	Heating	kW	5.7(6.0~1.5)	8.0(8.8~2.0)	12.0(13.8~3.6)	15.9(17.7~6.4)	19.2(22.1~8.0)
Rated power	Cooling	kW	1.5(2.0~0.4)	2.2(2.8~0.6)	3.0(4.0~0.9)	4.2(5.5~1.2)	5.1(6.4~1.5))
	Heating	kW	1.4(1.9~0.4)	2.1(2.7~0.5)	2.9(4.0~0.8)	4.1(5.4~1.2)	5.0(6.3~1.4))
Power supply		V/Ph/Hz	220~240/1/50	220~240/1/50	220~240/1/50	380~415/3/50	380~415/3/50
Air flow volume		m <sup>3</sup> /h	950/760/665	1200/960/840	1500/1200/1050	2000/1600/1400	2000/1600/1400
Noise level		dB(A)	42/39/37	42/39/37	45/42/39	48/45/42	48/45/42
External Static Pressure(ESP)		Pa	50/80	50/80	50/80	50/80	50/80
Safe protection device			High/low pressure switch, overload protection, counter clock wise and short phase protection				
			(power phases sequence protection), lack water (water-flow switch), anti-freeze protection, ect				
Dimension (WxDxH)	Indoor (Net)	mm	890×780×290	890×780×290	890×780×290	1250×780×290	1250×780×290
	Indoor (Packing)	mm	1110×890×370	1110×890×370	1110×890×370	1460×890×370	1460×890×370
	Outdoor (Net)	mm	800×315×545	890×320×670	900×320×790	940×365×1365	940×365×1365
	Outdoor (Packing)	mm	920×400×620	1020×430×720	1030×430×850	1080×460×1500	1080×460×1500
Weight	Indoor (Net/Gross)	kg	35/41	35/41	37/43	52/59	52/59
	Outdoor (Net/Gross)	kg	38/45	52/60	60/69	110/123	117/130
Pipe diameter	Liquid Side	111111(111011	6.35(1/4)	6.35(1/4)	9.52(3/8)	9.52(3/8)	9.52(3/8)
	Gas Side	)	12.7(1/2)	12.7(1/2)	15.88(5/8)	15.88(5/8)	15.88(5/8)
	Drainage	111111(111011	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)

#### Notes:

- $\textbf{1.Standard cooling work condition: indoor dry bulb temperature 27} \\ ^{\circ}\text{C,wet bulb temperature 19} \\ ^{\circ}\text{C; outdoor dry bulb temperature 35} \\ ^{\circ}\text{C,wet bulb temperature 24} \\ ^{\circ}\text{C.}$
- 2.Standard heating work condition: indoor dry bulb temperature 20°C; outdoor dry bulb temperature 7°C, wet bulb temperature 6°C.
- 3.All models, sizes, dimensions, and specifications are subject to change without prior notice, please refer to nameplates for the most accurate specifications.

## —— Delivery & Packaging ——

- 100% test before deliverying products.
- Products catalogue, installation & operation manual will be sent together.
- Tracking number will be sent to customer as soon as we ship the products.
- Item shipped in 25 working days against payment depends on the quantity.
- Four steps of pakacges, plastic film, foam, carton and plywood for stable transporation.
- Ocean shipping, railway shipment and air transportation are acceptable according to customer demand.

Feel free to contact us to receive further information about our products and energy solutions.

Notes:	
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# Withair, your perfect partner for successful projects.









01/2017 - The technical data in this document are not binding.

Withair reserves the right to introduce at any time whatever modifications deemed necessary for improving the product.



Withair Group (China) Limited
Withair (Nanjing) Industries Co.,Ltd

No.200 Lushan Road, Jianye District, Nanjing, 210019, China.

Tel: +86 139 159 28183 - Fax: +86 25 86696286

E-mail: info@withairmall.com Website: www.withairmall.com Please follow our social networks.