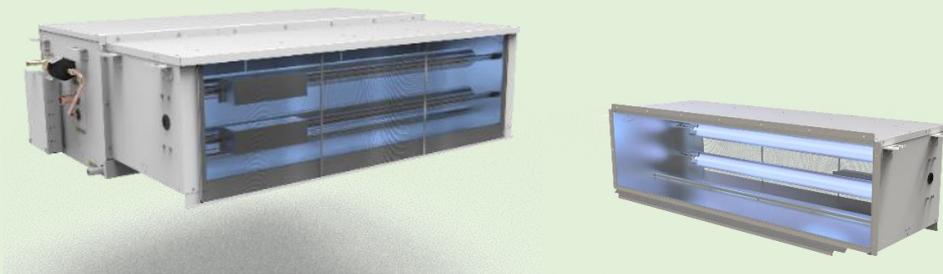


## Ducted Air Conditioners with inbuilt UVGI System



**UV Duct System**

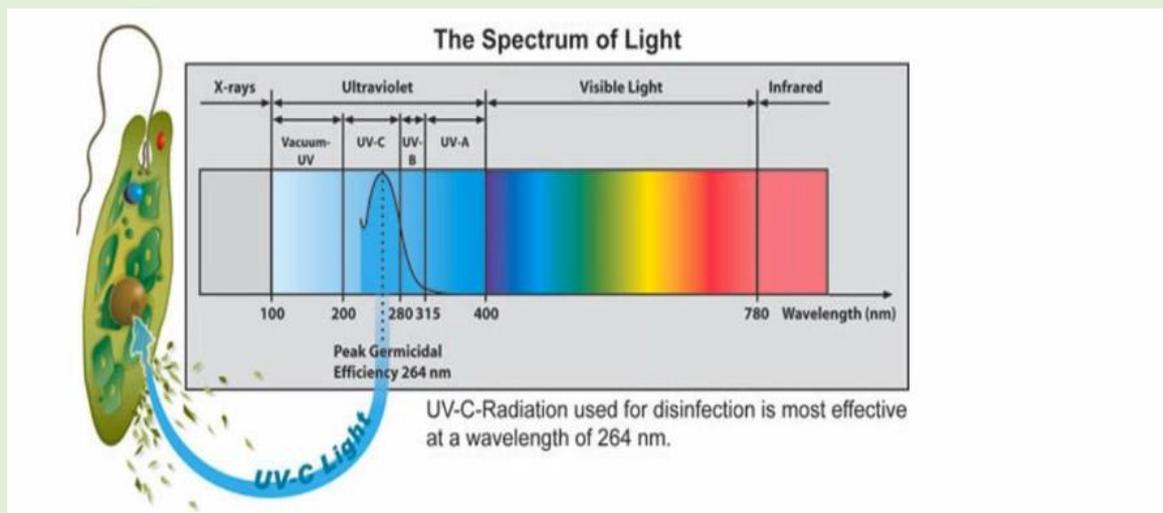


Air conditioners when operated properly, with proper treatment of air can effectively prevent spread of infectious aerosols.

Blue Star is committed to ensure safe air conditioning environment for customers. Blue Star UV Duct system can help to prevent spread of infectious particles while maintaining comfortable conditions inside the space.

Ultra Violet Germicidal Irradiation (UVGI) treatment is a proven technology to disinfect the air.

Short Ultraviolet (UVC) of wavelength of 253.7 nm is used to deactivate nucleic acid of microorganisms including virus. This makes them incapable of reproducing and spread is prevented.



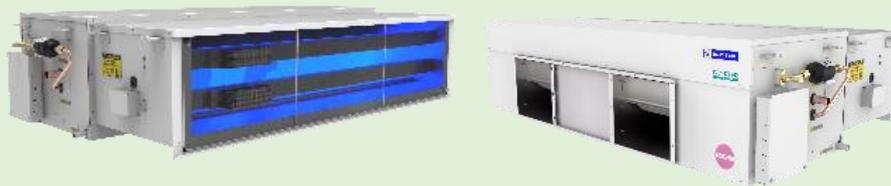
Apart from inactivating virus, control of bio-aerosols using UVGI treatment can also improve Indoor air Quality thus enhancing Occupants' Health, comfortness and productivity.

This systems ensures Clean Cooling Coil surface. It will be free from other pollutants like bacteria, mold, algae resulting in many other advantages:

- Reduced Pressure drop across the coil
- Maximum air flow with the least resistance
- Improved Heat Exchange Efficiency
- Overall reduction in power consumption
- Maintenance cost becomes economical as compared to other coil cleaning methodologies. This cleaning process is continuous and maintenance free.
- Unpleasant odour generated due to algae like particle is eliminated

### **Blue Star UV Duct System**

Blue Star UV Ducted air conditioning unit is a special device with inbuilt UVC System to ensure infection free atmosphere inside the air conditioned space.



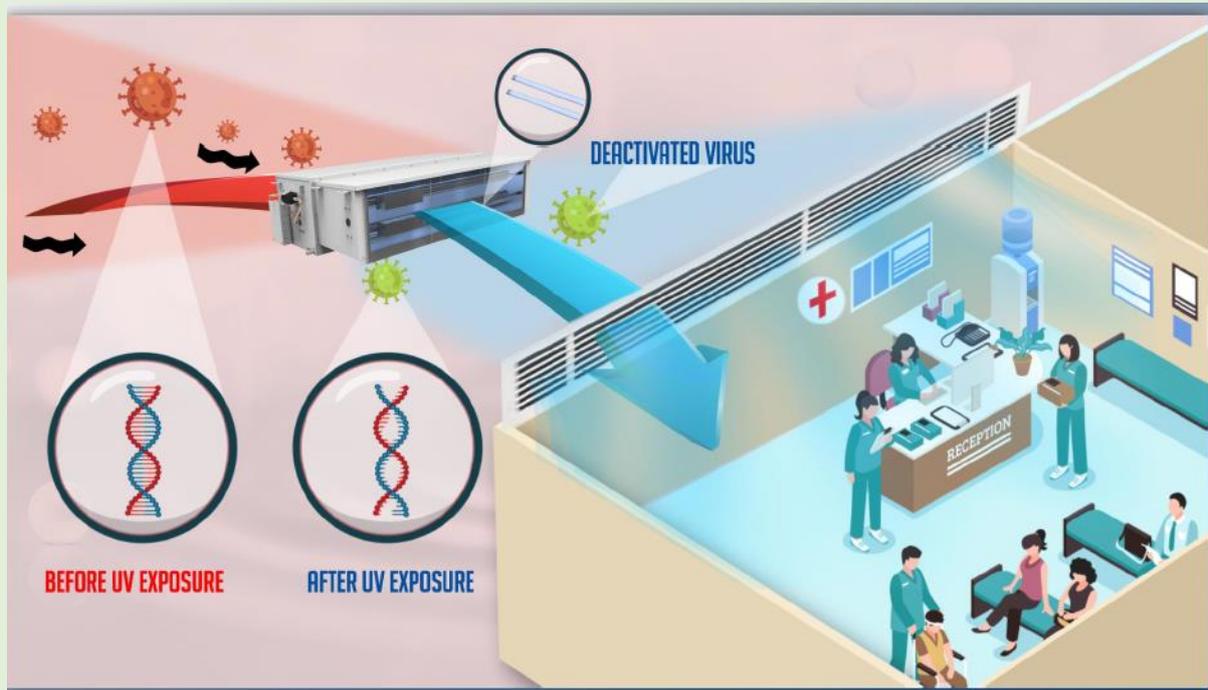
There are 3 different models available with both inverter and fixed speed compressor options. UV lamps along with other accessories are mounted near the cooling coil to take care of air disinfection along with coil cleaning on continuous basis. All required safety precautions are taken care in the design.

Optionally, UV duct accessory can be mounted in the supply air side if the particular installation needs this arrangement due to certain installation constraints.

### **Blue Star's Unique Design**

- In any UV air treatment system, proper selection of UV Tubes with correct dosage of UVC, time of exposure and velocity of air are very important. Blue Star UV duct System is designed after considering all these parameters carefully.
- Blue Star UV Duct System is readymade and easy to install ducted air conditioner. All the components are inbuilt.
- Various precautions are taken care in Blue Star's UV Duct System to ensure safety.
- UV Lamp is installed inside a compartment in close proximity to Cooling Coil with reflector arrangement which ensures 100% exposure of air thus improving UVC system performance.

It is a very suitable system for many applications requiring continuous air disinfection including hospitals where the possibility of infection spread is relatively more.



Other than inactivating air borne infectious particles, Blue Star UV Duct System also offers many other advantages:

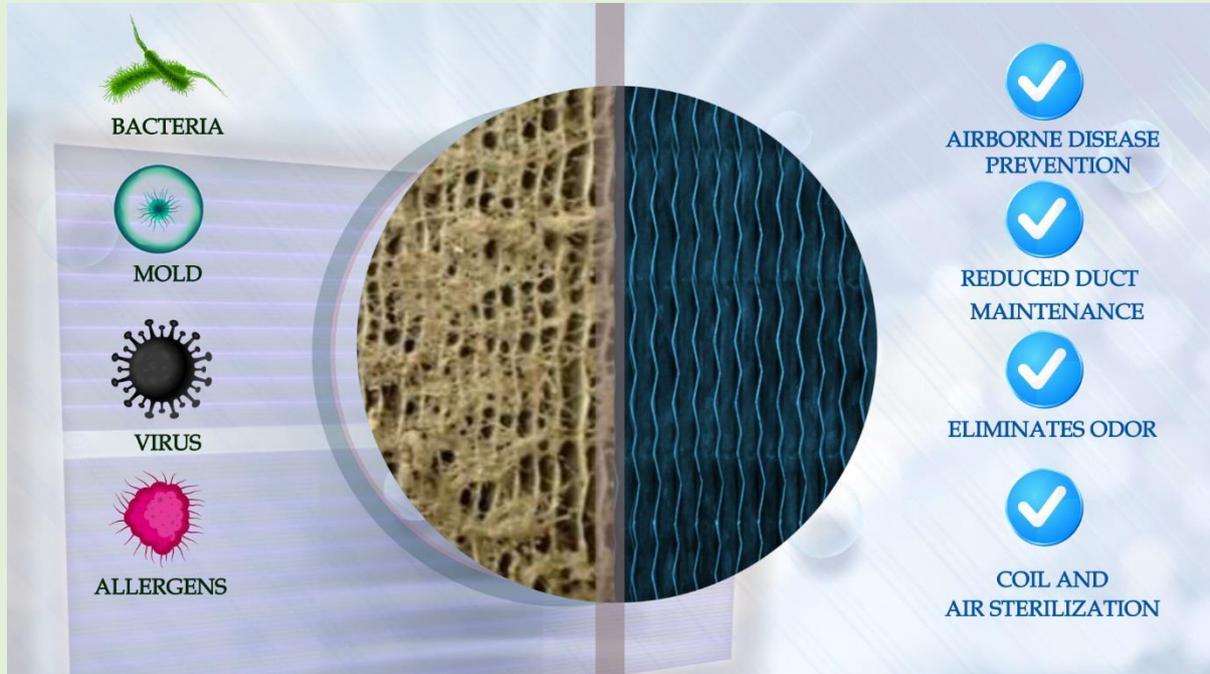
- ❖ It ensures clean duct thus eliminating periodical duct cleaning.
- ❖ It also eliminates odour generated due to algae
- ❖ It keeps the coil free from algae, mold etc.
- ❖ Overall efficiency of the unit is higher throughout the life of the product.

**Blue Star UV Duct System ensures continuous Power saving apart from infection control and clean indoor environment. Coil is maintained clean with minimum pressure drop and maximum air flow, which may result in power savings upto 7%.**

## Indoor Evaporator Coil

### Conventional Ducted System

### Blue Star UV Duct System



### Technical Data:

DESCRIPTION	UNITS	DSA661R3U / DSA1-601R3U	DSA1-961R3U	DSA1021R3U / DSA1321R3U / DSA1-1321R3U
Refrigerant		R 410A		
Power supply	V/Ph/Hz	380/ 420 V, 3 ph, 50Hz, AC Supply		
External Finish		Pure Polyester Coated GI Steel		
<b>Indoor Unit</b>				
Dimensions (WXDXH)	mm	1140X1150X 485	1485X1150X485	1840X1150X485
Power supply	V/Ph/Hz	230V,Single Ph, 50Hz AC		
Type of Blower		Centrifugal Forward Curved, Double Inlet, Double Width		
Nominal Air Flow	CMH	3740	5780	7480
	CFM	2200	3400	4400
Air Filter		Non-Woven Polyester Media Enclosed in HDPE Mesh		
Controller		Microprocessor based with LCD Display		
Net Weight	kg.	80	107	130
Power Supply to UV Lamp	V/Ph/Hz	230V, 1 ph, 50Hz, AC Supply		
UV Radiation Wavelength	nM	254	254	254
Safety limit switch for filter		Yes	Yes	Yes
Reflector		ALUMINUM ALLOY & TEMPERED AA6063 T6 , ANODISED 8 ~ 10 MICRON		
<b>Out Door Unit</b>				
Quantity per unit	No.	1	1	1
Compressor Type		Hermetically Sealed Scroll Type		
No. of Compressor/ODU		1	1	1
Dimensions (WXHXD)	mm	1020X935X420	1230X945X550	1435X950X635
Power Supply	V/Ph/Hz	380/ 420 V, 3 ph, 50Hz, AC Supply		
Condenser Type		Air Cooled FTHX		
Condenser Fan Type		Propeller Type		
Net Weight	kg	55	75	90

Specifications are subject to change without any notice.