

The equipment of the MEGALIT FS-1 series is bactericidal plants with a high UV dose for supply and exhaust ventilation and air conditioning systems.



UV recirculators for air disinfection

The uniqueness of the series:

High UV dose. Standard equipment for ventilation and air conditioning systems is designed for disinfection according to a relatively small list of microorganisms that require a UV dose of not more than 7-10 mJ/cm² (Staphylococcus aureus, Mycobacterium tuberculosis, etc.). MEGALIT FS-1 installations create a UV dose of at least 30 mJ/cm², which ensures disinfection by a much wider range of microorganisms, for example, in terms of total microbial number (TBC), the degree of disinfection is 99.9%.

Used for:

Food industry enterprises
Train stations and airports
Business, shopping and sports centers
General educational and preschool institutions
Medical and medical institutions.
Warehouses and storage facilities for finished products and raw materials.
Pharmaceutical manufacturing
Public catering and trade enterprises
Public cultural institutions
Industrial enterprises
Multi-storey residential buildings and structures
Agro-industrial complexes
Logistic Distribution Centers

We are offer a new series of UV equipment for air disinfection in ventilation and air conditioning systems of medium and high capacity MEGALIT F. Advantages of the bactericidal unit MEGALIT F:

1. The UV systems of the MEGALIT F series use a thermostabilized UV emitter based on the new highly effective FOTOTRON™ amalgam lamps. This allows you to effectively disinfect air at temperatures from 0 to + 35 ° C, at flow rates up to 10 m/s.
2. Special devices for balancing the air flow at the inlet (outlet) of the UV disinfection chamber in combination with the use of a reflective wall ensure reliable disinfection and high energy efficiency.
3. The disinfection chamber and its other elements are made of high quality stainless steel and are resistant to UV radiation.
4. UV Phototron™ lamp - a combination of the latest technologies in the production of ultraviolet sources and many years of experience in the field of UV disinfection. This type of lamp is characterized by the absence of free mercury, which makes them environmentally friendly.

The key features of PHOTOTRON™ lamps are:

- advanced internal nanocoating of a UV lamp according to Ultrathin technology
- innovative technology for creating a gas environment inside the lamp
- multicomponent amalgam FOTOTRON
- advanced lamp start-up and power supply system, based on a specially developed pair of lamp-ballast

5. The MEGALIT F control system allows you to control the following parameters:

- operation of each lamp;
- lamp operating hours;
- number of lamp starts;
- automatic restart, in the event of a power failure;

The MEGALIT F UV system has two control and monitoring modes, local and remote. In remote mode, it is possible to control the system and monitor its operation, both via dry contacts and the interface Modbus RTU (TCP).

Performance UV systems MEGALIT F

(the effectiveness of disinfection is given for *Staphylococcus Aureus*)

Type of UV system	Productivity at an efficiency of 99.9%, m3/h	Productivity at an efficiency of 99%, m3/h	Productivity at an efficiency of 95%, m3/h	Productivity at an efficiency of 90%, m3/h
MEGALIT 2200F	2200	2300	2500	2900
MEGALIT 3600F	3600	3800	4100	4800
MEGALIT 4600F	4600	4900	5400	6300
MEGALIT 7500F	7500	8200	9000	10500
MEGALIT 12000F	12000	12600	14000	16200
MEGALIT 17000F	17000	18000	20000	23200
MEGALIT 20000F	20000	21100	23200	27200
MEGALIT 30000F	32000	33500	37000	43200
MEGALIT 40000F	43000	45200	50000	58200
MEGALIT 55000F	55000	59000	65000	76200

Attention: for deep disinfection of air by other types of sanitary-indicative microorganisms, in addition *Staphylococcus Aureus*, for example, Total Microbial Number (TBC), *Bacillus subtilis* *, etc., a special subseries of more powerful MEGALIT - FS systems is made to order

PRODUCTIVITY MEGALIT FS-1 System

Type of UV system	Productivity at an efficiency of 99.9%, m ³ / h	The minimum required flow rate, m ³ /hour
MEGALIT 2200FS-13	650	430
MEGALIT 2200FS-12	950	580
MEGALIT 2200FS-11	1 400	870
MEGALIT 2200FS-10	2 100	1 300
MEGALIT 3600FS-10	3 300	1 950
MEGALIT 4600FS-10	5 100	2 900
MEGALIT 7500FS-10	7 300	4 150
MEGALIT 12000FS-10	11 000	6 800
MEGALIT 17000FS-10	16 300	9 700
MEGALIT 20000FS-10	25 500	16 000
MEGALIT 30000FS-10	33 600	20 400
MEGALIT 40000FS-10	40 000	24 200
MEGALIT 50000FS-10	55 000	37 000

TECHNICAL CHARACTERISTICS MEGALIT FS-1

Type of UV system	Dimensions, L x W x H, mm	Cross section of the ventilation duct, mm	Degree of dust and moisture protection	Number of lamps, pcs	Type of lamp	Nom. lamp life, h	Number of cycles on / off, no more	Cons. power, kW	Type of power supply
2200FS-13	2000x300x200	200x150	IP40 disinfection chamber Power and control panel IP 54	1	FOTOTRON	16000	5000	0,7	220V 50 Hz
2200FS-12	2000x300x250	200x200		1				0,7	
2200FS-11	2000x400x450	300x200		1				0,7	
2200FS-10	2000x400x350	300x300		1				0,7	
3600FS-10	2000x500x400	400x350		2				1,2	
4600FS-10	2000x700x400	600x350		3				1,7	
7500FS-10	2000x700x550	600x500		5				2,7	
12000FS-10	2000x900x650	800x600		6				3,2	
17000FS-10	2000x900x950	800x900		10				5,4	
20000FS-10	2000x1120x1170	1000x1100		14				7,5	
30000FS-10	2000x1320x1270	1200x1200		18				9,5	
40000FS-10	2000x1520x1270	1400x1200		22				12	
50000FS-10	2000x1720x1670	1600x1600		32				17	

UV SERIES MEGALIT FS-2

The equipment of the MEGALIT FS-2 series is bactericidal installations for systems of supply and exhaust ventilation and conditioning.



UV recirculators for air disinfection

Technical features:

The standard UV dose provided by the installation is designed for disinfection (99.9%) of *Staphylococcus aureus*, *Mycobacterium tuberculosis* and is 10 mJ/cm²

Effective work at a temperature from 0 to +35 ° C. The plants use special thermostabilized UV emitters based on the new highly efficient PHOTOTRON amalgam lamps.

Low pressure losses (100 Pa) allow the installation to be integrated into existing ventilation and air conditioning systems. The stainless steel housing is corrosion resistant.

The intelligent control system controls the following parameters:

- functioning of each lamp
- lamp operating hours
- number of lamp starts
- automatic inclusion in case of power failure.

Possibility of remote control and monitoring via Modbus RTU protocol or via dry contacts.

PRODUCTIVITY MEGALIT FS-2

Type of UV system	Productivity at an efficiency of 99.9%, m ³ / h	The minimum required flow rate, m ³ /hour
MEGALIT 2200FS-20	2 100	1 300
MEGALIT 3600FS-20	3 300	1 950
MEGALIT 4600FS-20	5 100	2 900
MEGALIT 7500FS-20	7 300	4 150

MEGALIT 12000FS-20	11 000	6 800
MEGALIT 17000FS-20	16 300	9 700
MEGALIT 20000FS-20	25 500	16 000
MEGALIT 30000FS-20	33 600	20 400
MEGALIT 40000FS-20	40 000	24 200
MEGALIT 50000FS-20	55 000	37 000

TECHNICAL CHARACTERISTICS MEGALIT FS-1

Type of UV system	Dimensions, L × W × H, mm	Cross section of the ventilation duct, mm	Degree of dust and moisture protection	Number of lamps, pcs		Nom. lamp life, h	Number of cycles on / off, no more	Cons. power, kW	Type of power supply
MEGALIT 2200FS-20	2000x400x350	300x300	IP40 disinfection chamber Power and control panel IP 54	1	FOTOTRON	16000	5000	0,35	220V 50 Hz
MEGALIT 3600FS-20	2000×500×400	400×350		1				0,6	
MEGALIT 4600FS-20	2000×700×400	600×350		1				0,7	
MEGALIT 7500FS-20	2000×700×550	600×500		2				0,9	
MEGALIT 12000FS-20	2000×900×650	800×600		2				1,2	
MEGALIT 17000FS-20	2000x900x950	800x900		3				1,7	
MEGALIT 20000FS-20	2000x1120x1170	1000×1100		4				2,2	380V 50Hz
MEGALIT 30000FS-20	2000x1320x1270	1200×1200		5				2,7	
MEGALIT 40000FS-20	2000x1520x1270	1400×1200		6				3,2	
MEGALIT 50000FS-20	2000x1720x1670	1600x1600		9				4,8	