



BETTER AIR FOR A BETTER QUALITY OF LIFE

UC1200



RESIDENTIAL SOLUTIONS

DESCRIPTION

The **UC1200** series was designed in order to improve the characteristics and quality of the air in residential and commercial surroundings and in the workplace.

The installation method is the strong point of this series of products. Thanks to their compact size, in fact, they can be attached to false ceilings very quickly and easily.

The ergonomic and elegant line, combined with its simple construction, make it seem an integral part of the furnishings.

At the same time, these installation methods make all maintenance operations very quick and easy. The **UC1200** series is available in eight different versions, some of which change integrated external air.

As they can be installed anywhere, they become real and proper oases of well-being, improving the perceived comfort of users.

It is therefore very advantageous to install this series of machines in the workplace where a comfortable environment and clean air are effective requirements for people who spend most of their time in closed areas.

The infrared remote control, standard supplied, is used to select one of the three machine operating speeds just with a press of the button.

Active electrostatic filter



Health Improvement



Fast and simple installation



Regenerable and recyclable materials



Energy saving



Sustainable product



OUR THREE TECHNOLOGY

BASIC[®] SYSTEM

BASIC SYSTEM[®]: represents the first technology developed by Expansion Electronic for the air treatment with active electrostatic filtration. It consists of air filtration combined with the emission of negative ions: both functions are activated simultaneously and are continuous over time.

AFC[®] SYSTEM

AFC SYSTEM[®]: this is a very efficient air treatment technology through the reduction of microorganisms present in the air with the sole use of active electrostatic filtration. The electronic circuit is more enhanced than the previous BASIC SYSTEM version.

Its microprocessor independently controls the efficiency of the active electrostatic filter which automatically adjusts the filtration level to the specific operating condition.

The information is managed through the control panel which allows the conditions of use to be changed at any time. It signals any anomalies and when it is necessary to clean the active electrostatic filters.

This technology does not provide for the negative ionization of the air.

NATURE[®] system

NATURE SYSTEM[®]: this is the most recent, complete and advanced technology, the result of years of company research and development, with the combination of active electrostatic filtration and negative ionization at alternating phases and regular intervals. This allows us to guarantee first of all the capture and inactivation of airborne pollutants and microorganisms, and then revitalize the air through the emission of negative ions.

Goal : to restore air quality conditions such as those of pristine natural environments (sea, mountains), where there is a balance of negative ions and positive ions such as to make people feel a feeling of well-being and freshness.

The user can select the night or day program:

- **Day function:** alternates the air filtration phase together with the revitalization
- **Night function:** revitalization phase.

PERFORMANCE

EQUIPMENT, PERFORMANCE AND CONTROLS	NATURE SYSTEM®	AFC SYSTEM®	BASIC SYSTEM
Built-in humidity sensor	✓	-	-
Dual voltage electrostatic filtering (by Expansion Electronic)	✓	✓	✓
CPU for real-time function management	✓	✓	-
Filtering performance control and management	✓	✓	-
Control and management of automatic daytime ionic balance (ideal microclimate)	✓	-	-
Control and management of night-time deodorisation with negative ions	✓	-	-
Control and management of the reduction in the daytime environmental bacterial level	-77%	-55%	-30%
Control and management of the reduction in the night-time environmental bacterial level	-92%	-	-
Control and management of the reduction in daytime and night-time environmental mould	-98%	-40%	-32%
Control and management of the reduction in environmental electrostatic charges	-99%	-	-25%
Control and management of ozone emissions according to EN60335-2-65:2003-07	<1ppm (limite 5ppm)	<1ppm (limite 5ppm)	<1ppm (limite 5ppm)
Automatic control and management of the quantity of daytime negative ion emissions	✓	-	-
Automatic control and management of the quantity of night-time negative ion emissions	✓	-	-
Performance tolerance	±1%	±1%	±9%
Activation of functions using the IR remote control	✓	✓	✓
Automatic restart following a power blackout	✓	✓	✓
Control LED check-up button	✓	✓	-
Alarm light for routine maintenance	✓	✓	✓
Pre-alarm light for routine maintenance	✓	✓	-
Fault warning light	✓	✓	✓
Filtration performance warning light	✓	✓	-
Negative ion emitter electrode/s in special wear-resistant alloy	✓	-	✓
Assembly kit	✓	✓	✓
Warranty on electronic components (for manufacturing defects)	3 years	3 years	2 years
Warranty on the motor/s (for manufacturing defects)	3 years	3 years	3 years
1 st speed filtration performance (on PM2.5)	99% constant	99% constant	95% inconstant
2 nd speed filtration performance (on PM2.5)	98% constant	98% constant	89% inconstant
3 rd speed filtration performance (on PM2.5)	96% costante	96% costante	86% inconstant



IAQ, Indoor Air Quality, is a term used to define the quality of the air inside buildings including its composition, temperature, relative humidity and above all the level of airborne contaminants.

All these parameters act as indicators for the comfort of the occupants of the building itself. The increase in external environmental pollution caused by particles, micro dusts, fumes, volatile organic compounds, microbial contaminants such as molds, bacteria, viruses and gases of various kinds (CO₂, Radon ...) accumulates inside buildings and influences the IAQ causing serious damage to the health conditions of the occupants.

Air pollution is one of the major causes of mortality in the world according to data collected by the WHO on an annual basis. A building with poor air quality leads to what is known as Sick Building Syndrome (SBS).

Adequate air filtration through the use of the active electrostatic filters allows to break down airborne contaminants, improving the quality of the indoor air of buildings, making them safer for our health.

INSTRUMENTAL IAQ

Measures the quality of the measured air using various systems and instruments.

LEGEND



PERCEIVED IAQ

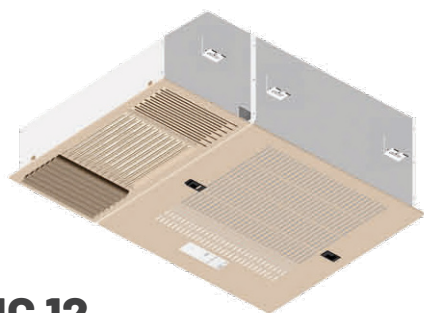
Measures the internal air quality from the point of view of human perception.

LEGEND



MODEL	TYPE	WITH SMOKERS				WITHOUT SMOKERS			
		Max. volume m ³ 	Max. n° People 	Instrumental IAQ 	Perceived IAQ 	Max. volume m ³ 	Max. n° People 	Instrumental IAQ 	Perceived IAQ
UC12	NATURE SYSTEM*			●●	****			●●●	*****
	AFC SYSTEM*	126	21	●	**	158	30	●●	***
	BASIC SYSTEM			●	**			●●	***
UC13	NATURE SYSTEM*			●●●●	*****			●●●●●	*****
	AFC SYSTEM*	126	21	●●●	****	158	30	●●●●	*****
	BASIC SYSTEM			●●	**			●●●	****
UC12S	NATURE SYSTEM*			●●●	****			●●●	****
	AFC SYSTEM*	100	16	●●	**	122	20	●●●	***
	BASIC SYSTEM			●	*			●●	**
UC13S	NATURE SYSTEM*			●●●●	*****			●●●●●	*****
	AFC SYSTEM*	100	16	●●●	****	122	20	●●●●	*****
	BASIC SYSTEM			●●	**			●●●	****
UC122	NATURE SYSTEM*			●●●	****			●●●●	****
	AFC SYSTEM*	145	24	●●	**	181	30	●●●	***
	BASIC SYSTEM			●	*			●●●	***
UC123	NATURE SYSTEM*			●●●●●	*****			●●●●●	*****
	AFC SYSTEM*	145	24	●●●	****	181	30	●●●●	*****
	BASIC SYSTEM			●●	**			●●●	***
UC122S	NATURE SYSTEM*			●●●	****			●●●●	****
	AFC SYSTEM*	129	21	●●	**	161	26	●●●	***
	BASIC SYSTEM			●	*			●●	**
UC123S	NATURE SYSTEM*			●●●●●	*****			●●●●●	*****
	AFC SYSTEM*	129	21	●●●●	****	161	26	●●●●	*****
	BASIC SYSTEM			●●●	**			●●●	***

UC 12 - UC 13

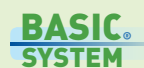


UC 12

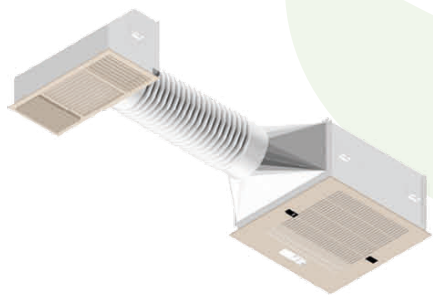


UC 13

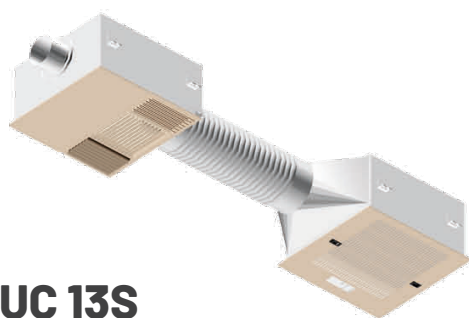
CHARACTERISTICS	u.m.	UC 12	UC 13
Recirculation airflow			
1 st speed	m ³ /h	660	660
2 nd speed	m ³ /h	1040	1040
3 rd speed	m ³ /h	1261	1261
External air capacity			
1 st speed	m ³ /h	-	100
2 nd speed	m ³ /h	-	180
3 rd speed	m ³ /h	-	270
Noise			
1 st speed	dB	44	47
2 nd speed	dB	54	57
3 rd speed	dB	58,50	61,50
Consumption	W	165	290
Power input	V-Hz	230 - 50/60	230 - 50/60
Dimensions AxBxC	mm	600x900x309	600x1200x309
Weight	Kg	36	

		Pollutant	1 st speed		2 nd speed		3 rd speed	
			UC 12	UC 13	UC 12	UC 13	UC 12	UC 13
	Efficiency (EN779)	PM10 (µg/m ³)	98,95%	98,95%	97,80%	97,80%	97,20%	97,20%
	Efficiency (EN779)	PM2,5 (µg/m ³)	92,00%	92,00%	87,25%	87,25%	85,00%	85,00%
	Efficiency	anti-bacteria	88,00%	88,00%	82,00%	82,00%	78,50%	78,50%
	Ionic environmental		✓	✓	✓	✓	✓	✓
	Air deodorisation		✓	✓	✓	✓	✓	✓
	Efficiency (EN779)	PM10 (µg/m ³)	98,95%	98,95%	97,80%	97,80%	97,20%	97,20%
	Efficiency (EN779)	PM2,5 (µg/m ³)	92,00%	92,00%	87,25%	87,25%	85,00%	85,00%
	Efficiency	anti-bacteria	55,00%	55,00%	50,00%	50,00%	45,00%	45,00%
	Ionic environmental		-	-	-	-	-	-
	Air deodorisation		-	-	-	-	-	-
	Efficiency (EN779)	PM10 (µg/m ³)	97,40%	97,40%	96,60%	96,60%	95,80%	95,80%
	Efficiency (EN779)	PM2,5 (µg/m ³)	91,00%	91,00%	86,50%	86,50%	83,50%	83,50%
	Efficiency	anti-bacteria	30,00%	30,00%	25,00%	25,00%	20,00%	20,00%
	Ionic environmental		-	-	-	-	-	-
	Air deodorisation		-	-	-	-	-	-

UC 12S - UC 13S



UC 12S

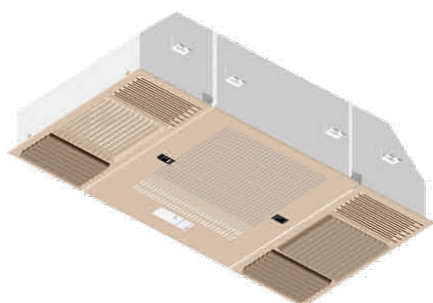


UC 13S

CHARACTERISTICS	u.m.	UC 12S	UC 13S
Recirculation airflow			
1 st speed	m ³ /h	494	500
2 nd speed	m ³ /h	782	780
3 rd speed	m ³ /h	982	1000
External air capacity			
1 st speed	m ³ /h	-	100
2 nd speed	m ³ /h	-	180
3 rd speed	m ³ /h	-	270
Noise			
1 st speed	dB	44	47
2 nd speed	dB	53,50	56,50
3 rd speed	dB	58	61
Consumo	W	165	290
Alimentazione	V-Hz	230 - 50/60	230 - 50/60
Dimensioni AxBxC	mm	600x5700x309*	600x6000x309*
Peso	Kg	37	51

		Pollutant	1 st speed		2 nd speed		3 rd speed	
			UC 12S	UC 13S	UC 12S	UC 13S	UC 12S	UC 13S
	Efficiency (EN779)	PM10 (µg/m ³)	99,15%	99,15%	98,70%	98,20%	97,80%	97,60%
	Efficiency (EN779)	PM2,5 (µg/m ³)	91,00%	92,25%	86,00%	87,80%	82,00%	85,90%
	Efficiency	anti-bacteria	88,00%	88,00%	82,00%	82,00%	78,50%	78,50%
	Ionic environmental		✓	✓	✓	✓	✓	✓
	Air deodorisation		✓	✓	✓	✓	✓	✓
	Efficiency (EN779)	PM10 (µg/m ³)	99,15%	99,15%	98,70%	98,20%	97,80%	97,60%
	Efficiency (EN779)	PM2,5 (µg/m ³)	91,00%	92,25%	86,00%	87,80%	82,00%	85,90%
	Efficiency	anti-bacteria	55,00%	55,00%	50,00%	50,00%	45,00%	45,00%
	Ionic environmental		-	-	-	-	-	-
	Air deodorisation		-	-	-	-	-	-
	Efficiency (EN779)	PM10 (µg/m ³)	97,60%	97,60%	97,50%	96,90%	96,40%	96,10%
	Efficiency (EN779)	PM2,5 (µg/m ³)	90,00%	91,20%	85,25%	86,80%	80,50%	83,90%
	Efficiency	anti-bacteria	30,00%	30,00%	25,00%	25,00%	20,00%	20,00%
	Ionic environmental		-	-	-	-	-	-
	Air deodorisation		-	-	-	-	-	-

UC 122 - UC 123

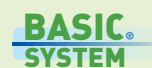


UC 122

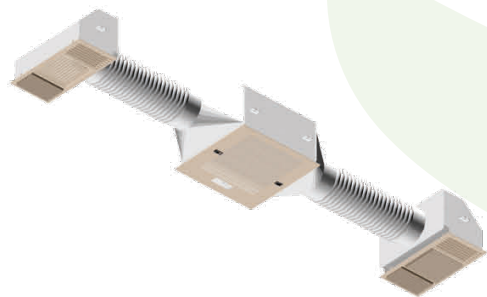


UC 123

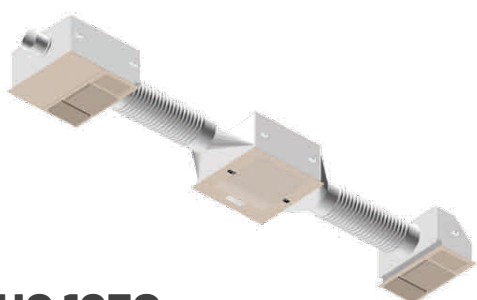
CARATTERISTICE	u.m.	UC 122	UC 123
Recirculation airflow			
1 st speed	m ³ /h	820	820
2 nd speed	m ³ /h	1260	1260
3 rd speed	m ³ /h	1450	1450
External air capacity			
1 st speed	m ³ /h	-	100
2 nd speed	m ³ /h	-	180
3 rd speed	m ³ /h	-	270
Noise			
1 st speed	dB	44	47
2 nd speed	dB	53	56
3 rd speed	dB	58	61
Consumption	W	165	290
Power input	V-Hz	230 - 50/60	230 - 50/60
Dimensions AxBxC	mm	600x1200x309	600x1500x309
Weight	Kg	44	58

		Pollutant	1 st speed		2 nd speed		3 rd speed	
			UC 122	UC 123	UC 122	UC 123	UC 122	UC 123
	Efficiency(EN779)	PM10 (µg/m ³)	98,15%	98,15%	97,20%	97,20%	96,75%	96,75%
	Efficiency(EN779)	PM2,5 (µg/m ³)	85,00%	85,00%	78,50%	78,50%	75,00%	75,00%
	Efficiency	anti-bacteria	88,00%	88,00%	82,00%	82,00%	78,50%	78,50%
	Ionic environmental		✓	✓	✓	✓	✓	✓
	Air deodorisation		✓	✓	✓	✓	✓	✓
	Efficiency(EN779)	PM10 (µg/m ³)	98,15%	98,15%	97,20%	97,20%	96,75%	96,75%
	Efficiency(EN779)	PM2,5 (µg/m ³)	85,00%	85,00%	78,50%	78,50%	75,00%	75,00%
	Efficiency	anti-bacteria	55,00%	55,00%	50,00%	50,00%	45,00%	45,00%
	Ionic environmental		-	-	-	-	-	-
	Air deodorisation		-	-	-	-	-	-
	Efficiency(EN779)	PM10 (µg/m ³)	96,60%	96,60%	96,00%	96,00%	95,30%	95,30%
	Efficiency(EN779)	PM2,5 (µg/m ³)	84,00%	84,00%	77,40%	77,40%	73,50%	73,50%
	Efficiency	anti-bacteria	30,00%	30,00%	25,00%	25,00%	20,00%	20,00%
	Ionic environmental		-	-	-	-	-	-
	Air deodorisation		-	-	-	-	-	-

UC 122S - UC 123S



UC 122S



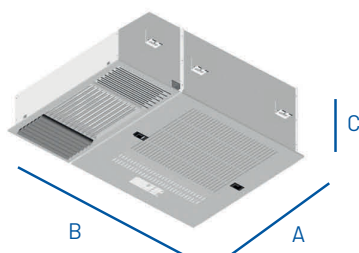
UC 123S

CARATTERISTICE	u.m.	UC 122S	UC 123S
Recirculation airflow			
1 st speed	m ³ /h	698	698
2 nd speed	m ³ /h	1078	1078
3 rd speed	m ³ /h	1289	1289
External air capacity			
1 st speed	m ³ /h	-	100
2 nd speed	m ³ /h	-	180
3 rd speed	m ³ /h	-	270
Noise			
1 st speed	dB	44	47
2 nd speed	dB	53	56
3 rd speed	dB	58	61
Consumption	W	165	280
Power input	V-Hz	230 - 50/60	230 - 50/60
Dimensions AxBxC	mm	600x10800x309*	600x11100x309*
Weight	Kg	37	60

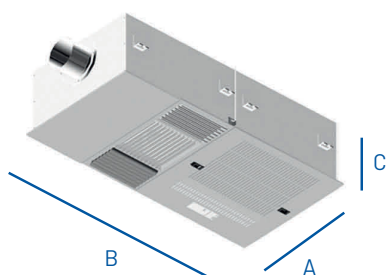
		Pollutant	1 st speed		2 nd speed		3 rd speed	
			UC122S	UC 123S	UC122S	UC 123S	UC122S	UC 123S
	Efficiency (EN779)	PM10 (µg/m ³)	98,85%	98,85%	97,52%	97,52%	97,20%	97,20%
	Efficiency (EN779)	PM2,5 (µg/m ³)	87,00%	87,00%	81,00%	81,00%	78,50%	78,50%
	Efficiency	anti-bacteria	88,00%	88,00%	82,00%	82,00%	78,50%	78,50%
	Ionic environmental		✓	✓	✓	✓	✓	✓
	Air deodorisation		✓	✓	✓	✓	✓	✓
	Efficiency (EN779)	PM10 (µg/m ³)	98,85%	98,85%	97,52%	97,52%	97,20%	97,20%
	Efficiency (EN779)	PM2,5 (µg/m ³)	87,00%	87,00%	81,00%	81,00%	78,50%	78,50%
	Efficiency	anti-bacteria	55,00%	55,00%	50,00%	50,00%	45,00%	45,00%
	Ionic environmental		-	-	-	-	-	-
	Air deodorisation		-	-	-	-	-	-
	Efficiency (EN779)	PM10 (µg/m ³)	97,30%	97,30%	96,30%	96,30%	95,80%	95,80%
	Efficiency (EN779)	PM2,5 (µg/m ³)	86,00%	86,00%	95,50%	95,50%	83,50%	83,50%
	Efficiency	anti-bacteria	30,00%	30,00%	25,00%	25,00%	20,00%	20,00%
	Ionic environmental		-	-	-	-	-	-
	Air deodorisation		-	-	-	-	-	-

DIMENSIONS

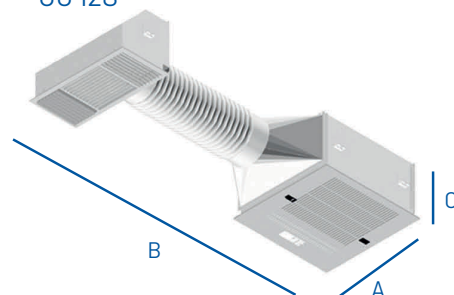
UC 12



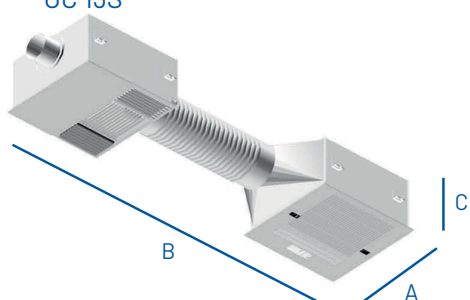
UC 13



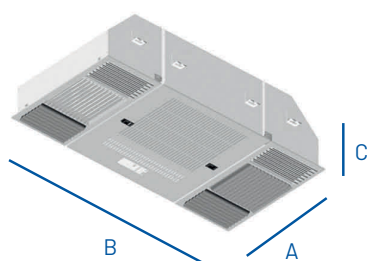
UC 12S*



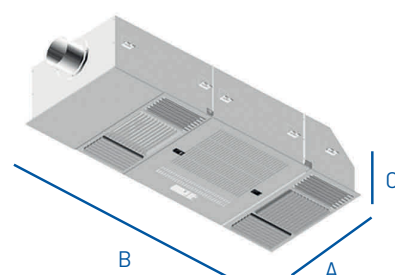
UC 13S*



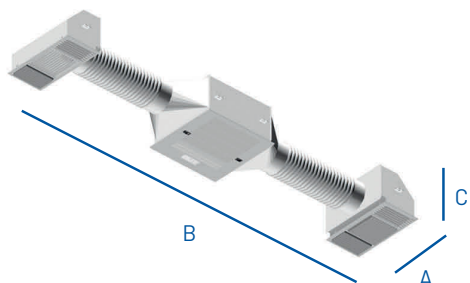
UC 122



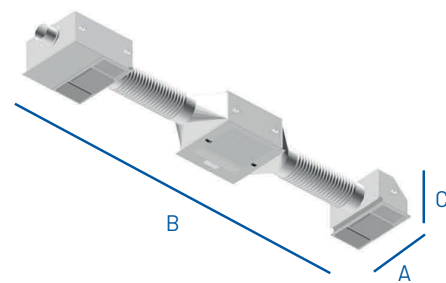
UC 123



UC 122S*



UC 123S*



UC 12	600 X 900 X 309
UC 13	600 X 1200 X 309
UC12S*	600 X 5700 X 309
UC13S*	600 X 6000 X 309
UC 122	600 X 1200 X 309
UC 123	600 X 1500 X 309
UC 122S*	600 X 10800 X 309
UC 123S*	600 X 11100 X 309

* maximum dimensions

COMPANY CERTIFICATIONS

Expansion Electronic had obtained various patents and had received numerous certifications which allowed the company to achieve great success and a large number of international awards.

We want to accredit our commitment and value through the conformity certifications of our products to provide our customers with absolute quality and efficiency, certifying their maximum safety.

ILH BERLIN
INSTITUT FÜR LUFTHYGIENE



Consiglio Nazionale
delle Ricerche



Instituto Argentino
de Normalización
y Certificación



**POLITECNICO
DI TORINO**



BETTER AIR FOR A BETTER QUALITY OF LIFE

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