



Compact and light line

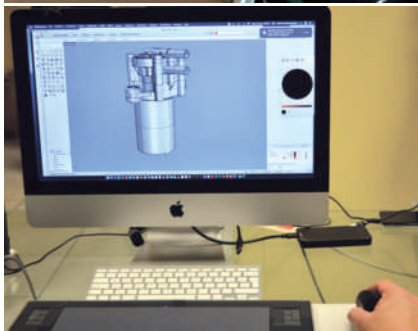
Speed  
and density  
that make  
the difference

**MODULAR**  
Line



**UR FOG**  
SECURITY FOGGING SYSTEMS

# NOREL



UR FOG Group



## NOREL MESHWAVE

Is a company that develops and manufactures electronic systems for different fields of application.

Since the company's foundation, in 2004, we have designed and produced boards for cars, trucks, boats, trains, airplanes, helicopters and industrial machines for both civil and military users. Our expertise range from system engineering to hardware/firmware design, EMC compliance and certification, boards manufacturing and consulting services.



## TECHNOWAVE INTERNATIONAL

Is the business unit following international sales of UR FOG group.

Based in Minsk, Republic of Belarus. It is specialized in sales and support of security fogging systems and wireless mesh technology. Technowave actually follows distributors, OEM and large system integrators in more than 50 countries. Yuliya Kolehichik, CEO of Technowave International Ltd, has been supporting all UR FOG international sales from the start of UR FOG group, following all stages of product developments to the establishment of the international sales channels.



## STEMAR

Is a precision mechanical workshop.

That was born in 2011 from the experience of the partners Luca and Paolo in the aeronautical field. The company is able to deal with complete mechanical processes such as milling, turning, grinding, welding, assembling of prototypes and series, construction of equipment and processing on any type of material. Stemar has a technical office on CAD CAM system programming and a department dedicated to products testing.



## WE DESIGN, PATENT AND PRODUCE FOGGING SYSTEM TECHNOLOGY

### UR Fog is the most innovative and powerful anti-intrusion system on the market.

A team of professionals and engineers with over 20 years of experience in product development and distribution management all over the world.

#### We are market leader in the security sector

Thanks to the high quality and superior technology of our products, guaranteed by the company's in-house technical expertise and patents protecting technological innovations.

#### UR Fog's philosophy is simple:

the best performing products at the best price with a focus on quality control.

UR Fog's exceptional fog emission speed performance is certainly the easiest way to compare with other existing systems.

Given the real and effective potential of this innovative security system, a rapidly expanding and growing market in business and demand has opened up, with sales volume expected to increase more than 20 times over the next 5 years.



#### Our quality and performance are certified worldwide

UR FOG machines have been developed, thanks to the internal R&D team and laboratories, with innovative solutions for security and fully respecting international approvals and regulations

#### CERTIFICATIONS

**EMC, FCC, CE**  
**EN 50131-8:2019**

The fog fluid is certified by EUROFINS, one of the largest multinational companies for chemical, cosmetic, medicine certification, as not toxic for humans and animals and the fluid content is not in contrast with any Islamic country regulation. Products have been already sold in over 80 worldwide countries.



**UR Fog: the first manufacturer of Fogging Systems who has obtained  
the Certification of Compliance to EN 50131-8:2019**



# MODULAR 200



Powerful and fast fogging system,  
can cover up to **600 m<sup>3</sup> in 28 seconds**  
(200 m<sup>3</sup> visibility less than 1 m)



# 200

## GENERAL SPECIFICATIONS

Compact Cabinet	yes
Weight of the fogging system	7,5 KG
Overall packaging weight	8,5 KG
Units on 100×120 cm pallet	36
Dimensions of the fogging system	30 x13 xH39
Size of the packaging	36 x19 xH45
Colors	white / black opt.
Operating time without mains power	over 1 hour
Heating time	about 2 hours
Vertical mounting	yes
Horizontal mounting	yes
Usb port for computer monitoring (Windows and Linux)	yes
Serial bus for standard UR FOG protocol	yes
Alarm kit	optional

## ELECTRICAL SPECIFICATIONS

Mains power	230 V or 120 V
Average consumption	37 W
Heater max power in start	170 W
Backup battery (not included)	yes

## FOGGING SYSTEM

New "layer" heating system	yes
Single shot coverage (visibility more than 1,5 m)	600 m <sup>3</sup>
Single shot coverage (visibility less than 1 m)	200 m <sup>3</sup>
Maximum emission time in a single shot	28 sec
Total discharge capability with full bag	850 m <sup>3</sup>
Number of bags	1
Amount of fluid in the bag	500 ml
Shot characteristics	programmable in sec.
Number of bags included	1
2 cabled inputs: arming and shooting	yes
1 cabled output: fault (empty bag, low battery/lack of power supply, system failure)	yes
Serial interface RS232	yes
Standard communication protocol	yes
Top internal riser for optional boards	yes
Side internal riser optional boards	yes
Front panel made of plastic material to simplify wireless communication	yes

## STANDARD

CE certification	yes
Certified fog fluid	yes
Compliant to the current europeans regulations	yes

# MODULAR 300



Powerful and fast fogging system,  
can cover up to **900 m<sup>3</sup> in 40 seconds**  
(300 m<sup>3</sup> visibility less than 1 m)



# 300

## GENERAL SPECIFICATIONS

Compact Cabinet	yes
Weight of the fogging system	8 KG
Overall packaging weight	9 KG
Units on 100×120 cm pallet	36
Dimensions of the fogging system	30 x13 xH39
Size of the packaging	36 x19 xH45
Colors	white / black opt.
Operating time without mains power	over 1 hour
Heating time	about 2 hours
Vertical mounting	yes
Horizontal mounting	yes
Usb port for computer monitoring (Windows and Linux)	yes
Serial bus for standard UR FOG protocol	yes
Alarm kit	optional

## ELECTRICAL SPECIFICATIONS

Mains power	230 V or 120 V
Average consumption	37 W
Heater max power in start	170 W
Backup battery (not included)	yes

## FOGGING SYSTEM

New "layer" heating system	yes
Single shot coverage (visibility more than 1,5 m)	900 m <sup>3</sup>
Single shot coverage (visibility less than 1 m)	300 m <sup>3</sup>
Maximum emission time in a single shot	40 sec
Total discharge capability with full bag	900 m <sup>3</sup>
Number of bags	1
Amount of fluid in the bag	500 ml
Shot characteristics	programmable in sec.
Number of bags included	1
2 cabled inputs: arming and shooting	yes
1 cabled output: fault (empty bag, low battery/lack of power supply, system failure)	yes
Serial interface RS232	yes
Standard communication protocol	yes
Top internal riser for optional boards	yes
Side internal riser optional boards	yes
Front panel made of plastic material to simplify wireless communication	yes

## STANDARD

CE certification	yes
Certified fog fluid	yes
Compliant to the current europeans regulations	yes

# MODULAR 400



Powerful and fast fogging system,  
can cover up to **1200 m<sup>3</sup> in 46 seconds**  
(400 m<sup>3</sup> visibility less than 1 m)



# 400

## GENERAL SPECIFICATIONS

Compact Cabinet	yes
Weight of the fogging system	8,5 KG
Overall packaging weight	9,5 KG
Units on 100×120 cm pallet	36
Dimensions of the fogging system	30 x13 xH39
Size of the packaging	36 x19 xH45
Colors	white / black opt.
Operating time without mains power	over 1 hour
Heating time	about 2 hours
Vertical mounting	yes
Horizontal mounting	yes
Usb port for computer monitoring (Windows and Linux)	yes
Serial bus for standard UR FOG protocol	yes
Alarm kit	optional

## ELECTRICAL SPECIFICATIONS

Mains power	230 V or 120 V
Average consumption	48 W
Heater max power in start	280 W
Backup battery (not included)	yes

## FOGGING SYSTEM

New "layer" heating system	yes
Single shot coverage (visibility more than 1,5 m)	1200 m <sup>3</sup>
Single shot coverage (visibility less than 1 m)	400 m <sup>3</sup>
Maximum emission time in a single shot	46 sec
Total discharge capability with full bag	1200 m <sup>3</sup>
Number of bags	1
Amount of fluid in the bag	750 ml
Shot characteristics	programmable in sec.
Number of bags included	1
2 cabled inputs: arming and shooting	yes
1 cabled output: fault (empty bag, low battery/lack of power supply, system failure)	yes
Serial interface RS232	yes
Standard communication protocol	yes
Top internal riser for optional boards	yes
Side internal riser optional boards	yes
Front panel made of plastic material to simplify wireless communication	yes

## STANDARD

CE certification	yes
Certified fog fluid	yes
Compliant to the current europeans regulations	yes

# MODULAR 500



Powerful and fast fogging system,  
can cover up to **1500 m³ in 48 seconds**  
(500 m³ visibility less than 1 m)



500

## GENERAL SPECIFICATIONS

Compact Cabinet	yes
Weight of the fogging system	9 KG
Overall packaging weight	10 KG
Units on 100×120 cm pallet	36
Dimensions of the fogging system	30 x13 xH39
Size of the packaging	36 x19 xH45
Colors	white / black opt.
Operating time without mains power	over 1 hour
Heating time	about 2 hours
Vertical mounting	yes
Horizontal mounting	yes
Usb port for computer monitoring (Windows and Linux)	yes
Serial bus for standard UR FOG protocol	yes
Alarm kit	optional

## ELECTRICAL SPECIFICATIONS

Mains power	230 V or 120 V
Average consumption	48 W
Heater max power in start	280 W
Backup battery (not included)	yes

## FOGGING SYSTEM

New "layer" heating system	yes
Single shot coverage (visibility more than 1,5 m)	1500 m³
Single shot coverage (visibility less than 1 m)	500 m³
Maximum emission time in a single shot	48 sec
Total discharge capability with full bag	1500 m³
Number of bags	1
Amount of fluid in the bag	750 ml
Shot characteristics	programmable in sec.
Number of bags included	1
2 cabled inputs: arming and shooting	yes
1 cabled output: fault (empty bag, low battery/lack of power supply, system failure)	yes
Serial interface RS232	yes
Standard communication protocol	yes
Top internal riser for optional boards	yes
Side internal riser optional boards	yes
Front panel made of plastic material to simplify wireless communication	yes

## STANDARD

CE certification	yes
Certified fog fluid	yes
Compliant to the current europeans regulations	yes

# MODULAR 800



Powerful and fast fogging system,  
can cover up to **2400 m<sup>3</sup> in 64 seconds**  
(800 m<sup>3</sup> visibility less than 1 m)



# 800

## GENERAL SPECIFICATIONS

Compact Cabinet	yes
Weight of the fogging system	9,5 KG
Overall packaging weight	10,5 KG
Units on 100×120 cm pallet	36
Dimensions of the fogging system	30 x13 xH39
Size of the packaging	36 x19 xH45
Colors	white / black opt.
Operating time without mains power	over 1 hour
Heating time	about 2 hours
Vertical mounting	yes
Horizontal mounting	yes
Usb port for computer monitoring (Windows and Linux)	yes
Serial bus for standard UR FOG protocol	yes
Alarm kit	optional

## ELECTRICAL SPECIFICATIONS

Mains power	230 V or 120 V
Average consumption	48 W
Heater max power in start	280 W
Backup battery (not included)	yes

## FOGGING SYSTEM

New "layer" heating system	yes
Single shot coverage (visibility more than 1,5 m)	2400 m <sup>3</sup>
Single shot coverage (visibility less than 1 m)	800 m <sup>3</sup>
Maximum emission time in a single shot	64 sec
Total discharge capability with full bag	2400 m <sup>3</sup>
Number of bags	1
Amount of fluid in the bag	1000 ml
Shot characteristics	programmable in sec.
Number of bags included	1
2 cabled inputs: arming and shooting	yes
1 cabled output: fault (empty bag, low battery/lack of power supply, system failure)	yes
Serial interface RS232	yes
Standard communication protocol	yes
Top internal riser for optional boards	no
Side internal riser optional boards	yes
Front panel made of plastic material to simplify wireless communication	yes

## STANDARD

CE certification	yes
Certified fog fluid	yes
Compliant to the current europeans regulations	yes



# Features MODULAR Line

## Compact and light line

Modular is the small, powerful and flexible fogging system that includes all the fastest technologies. Despite the small dimension, it is possible to insert optional boards (such as alarm centrals, sensors, etc.) in allocated areas. The front cabinet is made of plastic material to make the wireless communication easier between the internally installed devices and the outside.

Modular line includes all the latest patented technologies as **Fog Storm mechanical pump** and **"Layer" technology** heating exchange systems for a fast and very dry fog shoot.

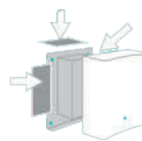
UR Fog fogging systems are innovative in their technology and performances, in order to guarantee the most effective protection against thefts and they have different patents.

**UR Fog fogging systems are certified by European regulation.**

Fog fluid is assessed as not dangerous for people and animals and does not leave residuals.



It is very easy to change and with a very competitive price.



It is possible to add optional boards inside the cabinet, such as alarm centrals, sensors, etc.



A unique serial bus to plug on the electronic board an add on card that allows to interface easily the machine with alarms and to control the fogging system even from remote locations. A standard protocol is available for all machines.



Thanks to the massive insulation UR FOG fogging systems have a very low power consumption and can shoot for a long time in absence of mains power; temperature remains stable over time.

### Long lasting operation time without mains

The innovative thermal insulation of the heater allows UR Fog systems to work for a long period of time without mains power: from 1 h up to 2 h!



**Power supply**  
to control the electronic board and pump

**"Layer" technology heating**

**Optional 2Ah battery**  
to power the electronic board and pump in case of mains power absence

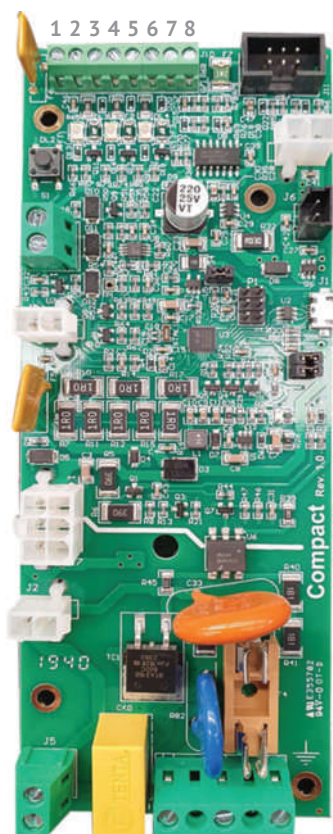
### FOG STORM PUMP

Specially designed to work with high-glycol percentage fluids



Example internal alarm station mounting





# Electronic board MODULAR

## Connection PIN description

### DC12V Power supply OUTPUT

- 1 + DC 12V Output (max 300 mA)
- 2 - GND

### OUTPUTS

- 3 READY OC - temperature reached
- 4 ARM OC - ready to shoot
- 5 EMPTY/FAULT OC - empty bag/faulty unit

### INPUTS

- 6 - GND
- 7 ARM Arming input
- 8 TRIG Shooting input

Note: both commands are contacts that close towards GND



	MODULAR 200	MODULAR 300	MODULAR 400	MODULAR 500	MODULAR 800
Max fog emitted in single shot	300 m <sup>3</sup>	300 m <sup>3</sup>	400 m <sup>3</sup>	500 m <sup>3</sup>	800 m <sup>3</sup>
Maximum shooting time	28 sec.	40 sec.	46 sec.	48 sec.	64 sec.
Max fog emitted with full fog bag	850 m <sup>3</sup>	900 m <sup>3</sup>	1200 m <sup>3</sup>	1500 m <sup>3</sup>	2400 m <sup>3</sup>
Pump	Fog Storm	Fog Storm	Fog Storm	Fog Storm	Fog Storm
Fog tank capacity	500 ml	500 ml	750 ml	750 ml	1000 ml
Working time without mains power	About 1 hour	About 1 hour	About 1 hour	About 1 hour	About 1 hour
Heating time	About 1 hour	About 1 hour	About 2 hours	About 2 hours	About 2 hours
Horizontal mounting	Yes	Yes	Yes	Yes	Yes
Serial bus with standard protocol	Yes	Yes	Yes	Yes	Yes
Power consumption	37 W	37 W	48 W	48 W	48 W
Back up battery	2 Ah	2 Ah	2 Ah	2 Ah	2 Ah
Electronic board	Modular	Modular	Modular	Modular	Modular
Cabinet	Plastic material	Plastic material	Plastic material	Plastic material	Plastic material
Non-dangerous fog certification	Yes	Yes	Yes	Yes	Yes
Standard European certifications	Yes	Yes	Yes	Yes	Yes
Heater	170 W	170 W	280 W	280 W	280 W
Shooting time programmable in seconds	Yes	Yes	Yes	Yes	Yes

## Accessories and refills

### MODULAR Line

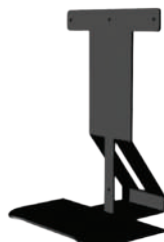
CODE	ACCESSORIES AND REFILLS	MODULAR 200	MODULAR 300	MODULAR 400	MODULAR 500	MODULAR 800
FFLXRC2/3	Fluid bag 500 ml	■	■			
FFLXRC2/3FG	Fluid bag 500 ml Food Grade	■	■			
FFLXRC4/5	Fluid bag 750 ml			■	■	
FFLXRC4/5FG	Fluid bag 750 ml Food Grade			■	■	
FFLXTRC8	Fluid bag 1000 ml					■
FFLXTRC8FG	Fluid bag 1000 ml Food Grade					■
FPUTRCP	Top riser	■	■	■	■	
FPUSRCP	Side riser	■	■	■	■	■
FPUSTD	Desk stand	■	■	■	■	■
FPUWB	Orientable wakll bracket	■	■	■	■	■
F23KITDM	Demo Kit: modular (key+keyfob/receiver)	■	■	■	■	■
URCLWF	<b>Active Cloud Lan / WIFI board</b>	■	■	■	■	■
URCLWFA	Wifi antenna module	■	■	■	■	■
URCLWFM	Mounting Kit Modular (cable 12V + flat cable Modular)	■	■	■	■	■



#### Active Cloud LAN / Wifi board

The WIFI LAN board allows wired or wireless Lan connection. Through the extremely secure Cloud service, provided for free, it allows, in addition to system monitoring, to remotely arm, shoot and set shooting time of the fogging system.

#### Desk stand



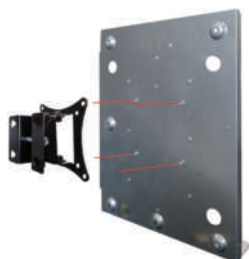
#### Top riser



#### Side riser



#### Orientable wakll bracket



#### Demo Kit MODULAR



#### Fluid bag



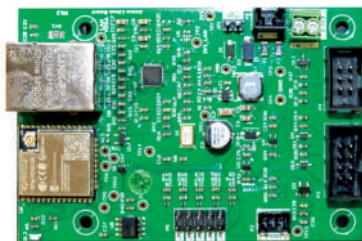
Active Cloud

MODULAR  
Line



A SINGLE CONTROL PANEL TO MANAGE  
ALL YOUR FOGGING SYSTEMS  
FROM SMARTPHONES, PC, TABLETS





## ACTIVE CLOUD LAN / WIFI BOARD

(URCLWF)

The WIFI LAN board allows wired or wireless Lan connection. Through the extremely secure Cloud service, provided for free, it allows, in addition to the systems monitoring, to remotely arm, shoot and set shooting time of the fogging system.



### Developer APIs available

Ability to develop **customized connectivity solutions** for integrating **UR Fog systems** into pre-existing intranets (*banks, regulators, etc.*)

**SECURE** SSL/TLS encrypted communication

**REMOTE DEVICE ASSISTANCE** analytical control of all features and real-time system diagnostics

**WIFI & WIRED LAN** on the same card



## Control panel for the single fogging systems or general control of all the fogging systems installed

ARMING AND SHOOTING SIGNALS TO ACTIVATE ONE OR MORE FOGGING SYSTEMS AT THE SAME TIME



### Details

Installation address, reference person, phone and system insights

### Alarm

#### E-MAIL ALERTS

Insertion of up to 3 addresses and selection of warning options to associate

### Shooting

Setting shooting time in seconds



### Log Events

System Registration  
500 Events/Commands



### REMOTELY ARMAMENT AND SHOOTING



### SHOOTING VERIFICATION TEST



### FLUID CONTROL

AND BAG RESET  
Signaling of systems where the fluid level is exhausted or in reserve

### MULTI-LEVEL SYSTEM

It is possible to authorize users individually with different permissions for the management and/or control of the systems

Monitoring | Maintenance | Complete control



Total number of managed systems



N. systems connected to the Cloud



N. ready-to-shoot systems



N. armed systems



N. tampered systems



N. systems with low fluid quantities



N. battery-powered systems in the absence of AC network



N. systems with error reporting



N. systems that have shot in the last 24 hours



# Fluids

## MODULAR Line



NO VISIBILITY  
NO THEFT

### ANTI-INTRUSION FLUID **WHITE OUT**

White Out is a mixture created to generate a real wall of fog in seconds.

The formula has been designed and optimized to generate the densest and highest persistence fog, so to ensure zero visibility into the premises.

**The fog generated is completely non-toxic, flavourless and leaves no residue.**  
Toxicological evaluation according to EN ISO 16000-1:2006

## 1 FOGGING SYSTEM 2 FUNCTIONS

The only fogging  
system  
to hygienize  
everything



# The only certified Anti-Intrusion Fogging Systems for the protection of food production, processing and sales environments.

Produced fog has been tested according to the Food Contact regulation to meet food products without altering their composition and organoleptic properties.

*Tests carried out in accordance with Regulation (EC) No 1935/2004.*



## ANTI-INTRUSION FLUID WHITE OUT FOOD GRADE

White Out Food Grade is the innovative mixture designed to safeguard food productions, processing and sales environments.

**FOOD CONTACT certificate for FOOD & BEVERAGE departments.**



## HYGIENIZING FLUID

### PuriFog by UR Fog

#### HYGIENIZING AND CLEANING QUICKLY

PuriFog is a hygienizing system researched for everyday use.

It thoroughly cleans and hygienizes any environment,

a perfect supplement for daily hygienizing process at home and at work.

When atomised, it cleans and hygienizes the air and all surfaces it comes into contact with, its efficiency is more 1,700 times higher than a normal spray system.

**It captures 99.9% of micro-particulates in the air and removes over 99% of bacteria.**

**MODULAR**  
Line

# SECURITY FOGGING SYSTEMS

**UR Fog:**

the first manufacturer  
of Fogging Systems  
who has obtained the Certification  
of Compliance to **EN 50131-8:2019**



**UR Fog S.r.l.**

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