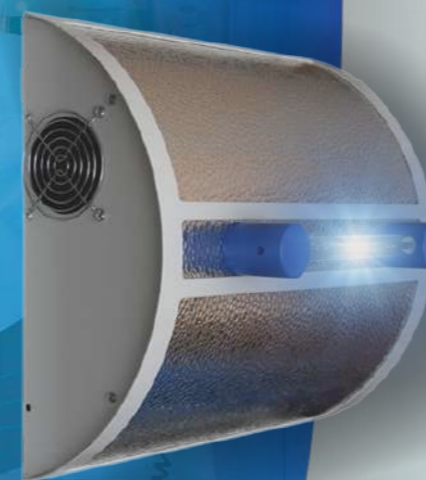




PULSED ULTRAVIOLET UNITS



Inactivation of all pathogens



99.99%
disinfection efficiency



disinfection cycle from
30sec

ISO 9001:2015
ISO 13485:2016



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OUR ACHIEVEMENTS

1991 - 2019

WE ARE TRUSTED



Scientific and Industrial Enterprise "Melitta", Ltd.

WE ARE THE FIRST IN THE WORLD

TO DEVELOP A PULSED ULTRAVIOLET UNIT

14+

YEARS OF SERIAL PRODUCTION

10+

RUSSIAN AND INTERNATIONAL PATENTS

2000+

UNITS COMBAT INFECTIONS IN RUSSIA AND WORLDWIDE

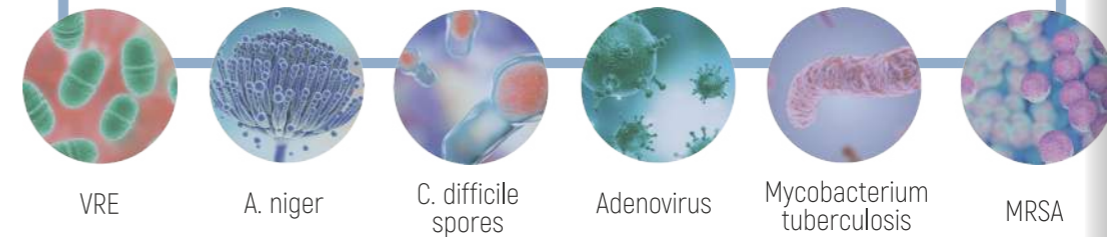


Russian Government Prize in science and technology for "development and implementation of pulsed plasma-optical technology and units in space medicine and practical healthcare"

APPLICATION

Pulsed ultraviolet units of Yanex series with xenon lamps are intended for air and open surfaces disinfection from any types of pathogens.

BACTERIA, THEIR SPORES AND NOSOCOMIAL DRUG-RESISTANT STRAINS, VIRUSES, FUNGI AND MOLD



APPLICATION AREAS

- Healthcare-associated infections (HAI) prevention at medical facilities of various purpose
- Urgent disinfection of rooms in between operations, treatments, patients' visits

OUR MISSION

We say **NO** to mortality from healthcare-associated infections!



Surgery



Oncology



Obstetrics & Gynaecology



Phthisiology



Isolation hospitals



Resuscitation



Ambulance



Ophthalmology



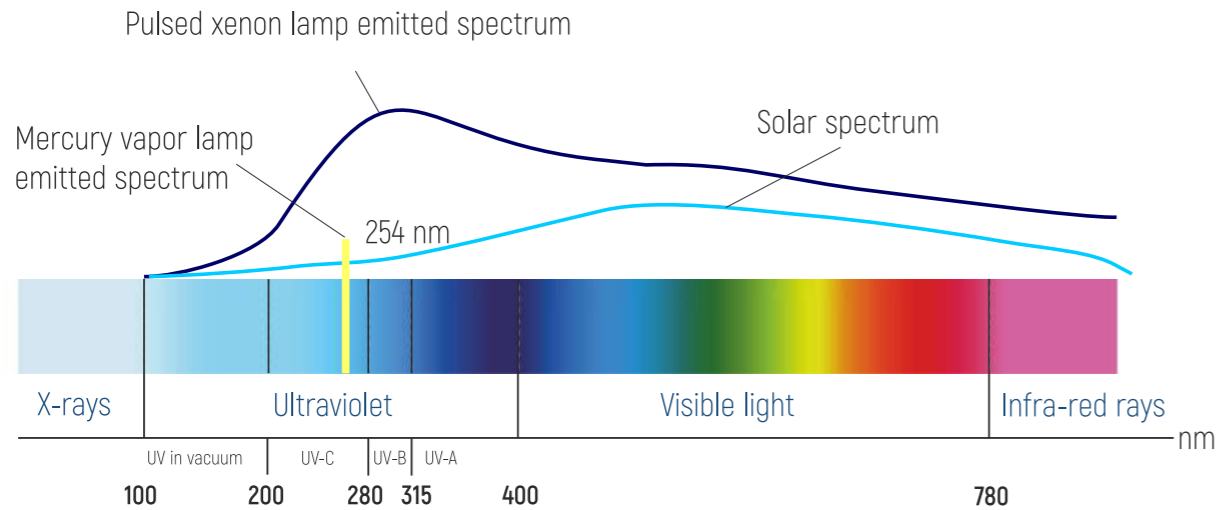
Dentistry



Outpatient clinics



Space medicine



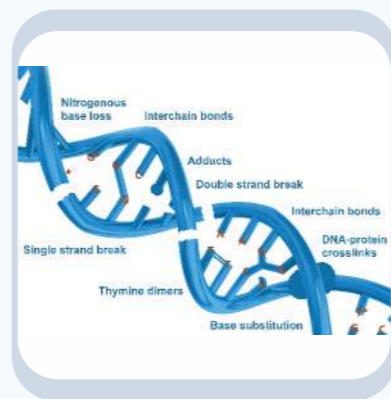
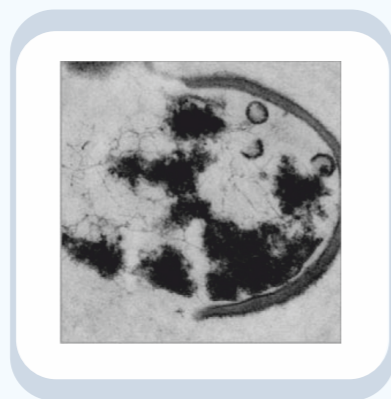
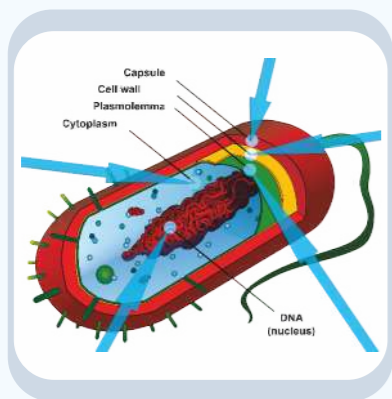
The technology is based on simultaneous air and surfaces disinfection from microorganisms and viruses by high-intensity ultraviolet light of continuous spectrum (200-400 nm). The light source is a pulsed xenon lamp that generates the continuous spectrum irradiation in the region from 200 to 700 nm.

Mechanism of action

Continuous spectrum UV light initiates destructive processes in basic cell structures responsible for its vital activity:

- Photohydration – attracting water molecules thus inhibiting cell's vital activities;
- Photosplitting – breaking of DNA strands;
- Photodimerization – damaging DNA bonds;
- Photocrosslinking – damaging cell walls and causing lysis.

The synergy of these processes in microorganisms and viruses leads to their full destruction with high efficiency (99.99%-100%) and within shortest time.



ADVANTAGES

Inactivation of all bacteria types (vegetative forms, spores, multiresistant strains, unsusceptible to antibiotic treatment and chemical disinfectants), fungi and viruses

INACTIVATION EFFICIENCY

On the surfaces and in the air – 99.99%
In presence of organic load – 99.99%

MINIMUM TREATMENT TIME

for standard rooms
from 30 seconds to 5 minutes

CUSTOM DISINFECTION MODES

Automatic calculation of time required to reach the 99.99 % disinfection efficiency at the set distance

Continuous **GERMICIDAL DOSE CONTROL** and maintaining its **SET LEVEL** during the whole disinfection cycle

SELF-DIAGNOSTIC and **ADJUSTMENT** of operating modes

GREEN TECHNOLOGY:

Environmental friendliness of disinfection
Noble gas xenon instead of mercury or chemicals
No specific disposal is required for the non-toxic xenon lamps

RELIABILITY, EASE AND SAFETY OF USE

Robust shockproof frame for longer lifetime
Intuitive controls

Automated start/stop and lamp elevation, delayed start

Audible warning of disinfection start

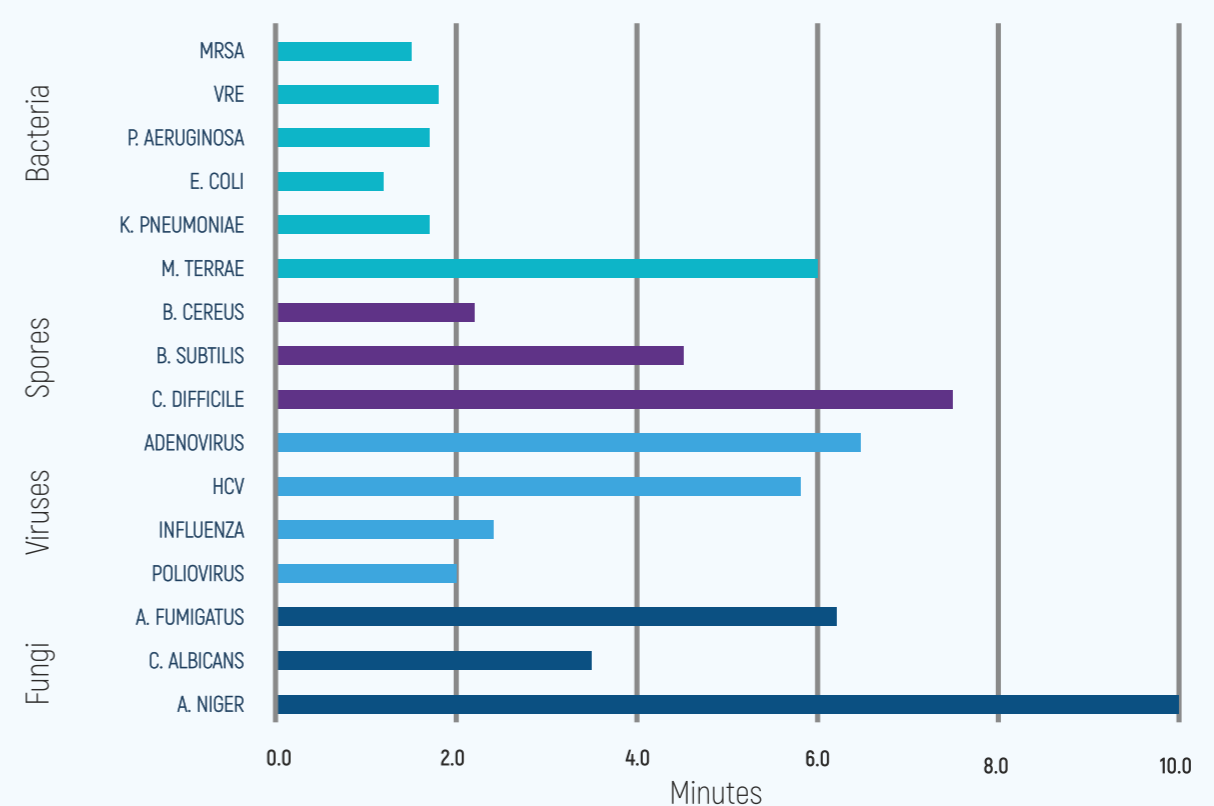
Personal PIN for every user

Motion sensor built in the remote control – automated stop if the door is opened



Over **60** research studies
Over **50** clinical tests
Over **100** studied microorganisms

THE EFFICIENCY IS CONFIRMED BY ACCREDITED LABORATORY TEST CENTERS



Inactivation time of epidemiologically important microorganisms and viruses by Yanex-2M at 2-meters' distance with 99.9-99.99% efficiency



99.99% efficiency



High speed



Mobility



Remote control



Custom disinfection modes



Germicidal dose control



Computer based control system



Disinfection cycles log



TECHNICAL SPECIFICATIONS

Parameter	Value
DISINFECTION RANGE WITH 99.99% EFFICIENCY FOR ONE CYCLE	Up to 5 m / 100 m ² room
LIGHT SOURCE	Pulsed xenon ultraviolet lamp
ELECTRIC POWER SUPPLY	230 V, 50 Hz
CONTROL	Sensor control panel and remote control
SAFETY CONFORMANCE	IEC 61010-1:2010
INTERNATIONAL STANDARDS COMPLIANCE	CE, ISO 9001:2015, ISO 13485:2016

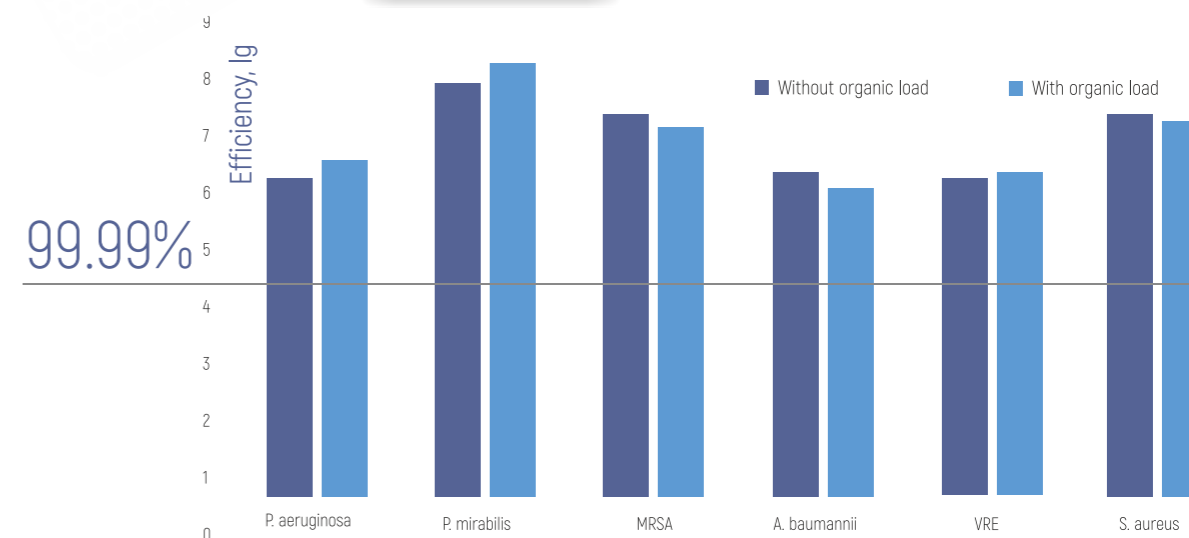
YANEX-2M

MOBILE UNIT

Mobile pulsed ultraviolet unit for air and surfaces disinfection



Remote control for your convenience



An example of decontamination efficiency on various open surfaces against S. aureus, as well as in presence of organic load at 2-meters' distance (Scientific Research Institute of Disinfectology of Rospotrebnadzor, 2016)



YANEX-5

PORTABLE UNIT

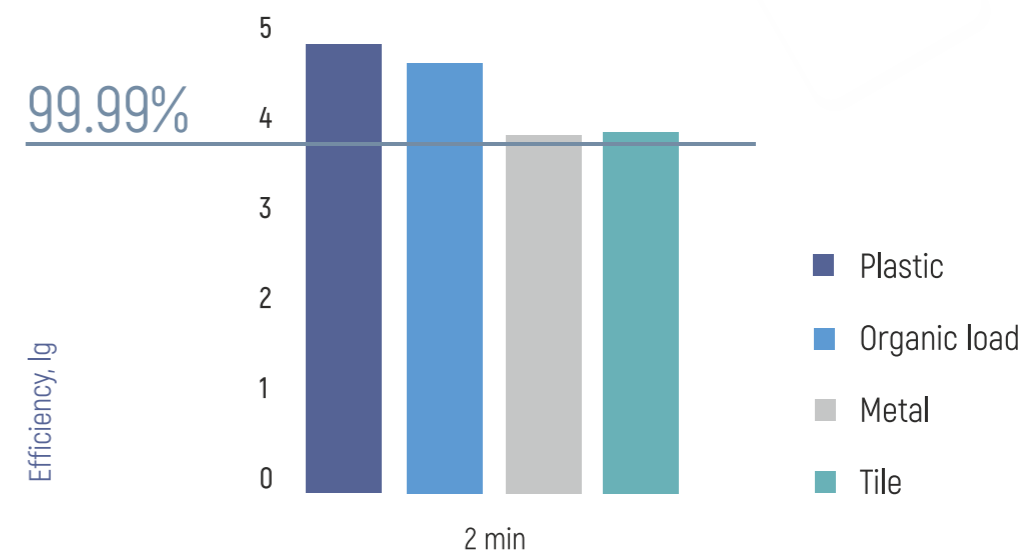
TECHNICAL SPECIFICATIONS

Parameter	Value
DISINFECTION RANGE WITH 99.99% EFFICIENCY FOR ONE CYCLE	Up to 3 m / 36 m ² room
LIGHT SOURCE	Pulsed xenon ultraviolet lamp
ELECTRIC POWER SUPPLY	230 V, 50 Hz
CONTROL	Sensor control panel and remote control
SAFETY CONFORMANCE	IEC 61010-1:2010
INTERNATIONAL STANDARTS COMPLIANCE	CE, ISO 9001:2015, ISO 13485:2016



Remote control for your convenience

Portable pulsed ultraviolet unit for air and open surfaces disinfection



Disinfection efficiency by Yanex-5 from S. aureus at 2-meters' distance from various surfaces



99.99% efficiency



High speed



Mobility



Remote control



Custom disinfection modes



Germicidal dose control



Computer based control system



Disinfection cycles log



99.99% efficiency



High speed



Remote control



Custom disinfection modes



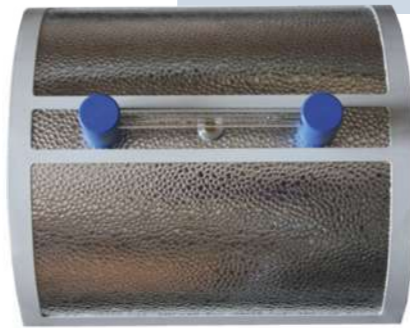
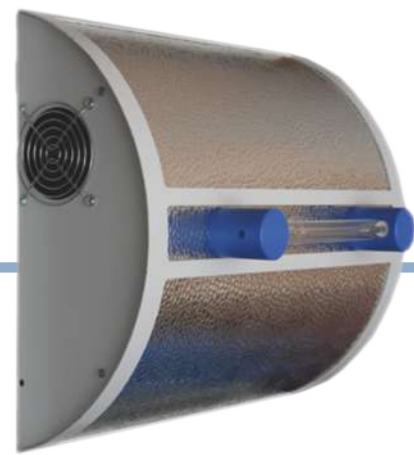
Germicidal dose control



Computer based control system

YANEX-ST

STATIONARY UNIT



Stationary pulsed ultraviolet unit for air and open surfaces disinfection

A complex of two or more irradiators mounted on walls or the ceiling to eliminate shadow areas in the room and to ensure the disinfection efficiency due to creating the so-called "light pot" effect



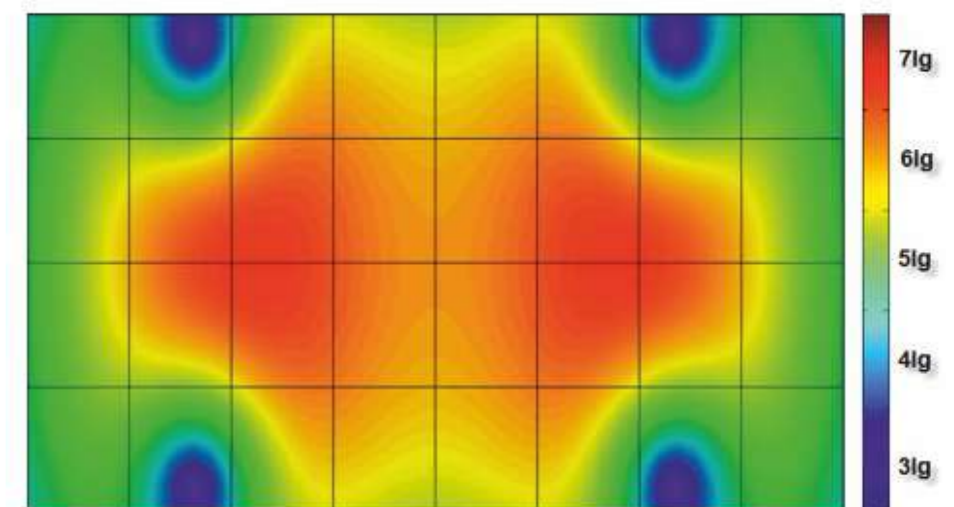
TECHNICAL SPECIFICATIONS

Parameter	Value
DISINFECTION RANGE FOR ONE CYCLE	Unlimited Depends on the irradiators' number
LIGHT SOURCE	Pulsed xenon ultraviolet lamp
ELECTRIC POWER SUPPLY	230 V, 50 Hz
CONTROL	Control panel
SAFETY CONFORMANCE	IEC 61010-1:2010
INTERNATIONAL STANDARDS COMPLIANCE	CE, ISO 9001:2015, ISO 13485:2016



Example of disinfection cycle duration for a 75 m³ room from bacterial spores with 99.9 % efficiency by Yanex-ST with 4 irradiators

Example of disinfection cycle duration for a 75 m³ room from bacteria with 99.9 % efficiency by Yanex-ST with 4 irradiators



Example of placing the Yanex-ST irradiators for creating the "light pot" effect