



**UVGERMI**<sup>®</sup>  
ULTRAVIOLETS DE HAUTE TECHNOLOGIE

*Specialist in  
microbiological water treatment  
using ultraviolet reactors.*

● ○ ● MADE IN FRANCE

## WATER FOR HUMAN CONSUMPTION

- DRINKING WATER PRODUCTION PLANT
- FOR PUBLIC SITES: hotels, camp sites, restaurants, holiday centres, etc.
- RENTAL ACCOMMODATION

### NEEDS

Implement an efficient treatment to destroy all of these pathogenic microorganisms without altering the organoleptic qualities of the water.

Deploy a multi-barrier approach to water disinfection: UV is an excellent complement to chlorination.

### THE ISSUE

Water intended for human consumption can contain pathogenic microorganisms: faecal streptococci, faecal coliforms, Giardia lamblia, Cryptosporidium parvum, etc.

To obtain water that is suitable for drinking, bacteriologically-speaking, these bacteria must be eliminated.

The traditional treatment of drinking water by chlorination is effective, but causes the formation of disinfection byproducts that alter the organoleptic properties of the water.

Chlorination does not destroy protozoa, such as Giardia and Cryptosporidium.





## REVIEW OF REGULATIONS

In France, the use of water for human consumption is subject to authorisation from a government representative in the department concerned (article L1321-7 of the public health code). The UV reactors used for water intended for human consumption must comply with the stipulations of the Decree of 9 October 2012 (commonly referred to as ACS UV).

This certificate of sanitary compliance can only be issued by an approved laboratory (CARSO, EUROFINs) on the following main criteria: the safety of the materials used, effectiveness validated by biosimetry testing performed by a certified body adhering to an international protocol (DVGW-technical standard W294, ÖNORM-technical standard M5873), and validity of the sanitary compliance certificate (issued for a five-year period).

## THE SOLUTION

UV treatment of microorganisms is considered to be one of the most effective disinfection techniques against bacteria, viruses and protozoa.

Exposure to UV radiation is a physical treatment that destroys the microorganisms using light from the UVC spectrum, particularly at wavelength 254 nm, at which effectiveness is maximal.

The nucleic acids (DNA and RNA) of the microorganisms are damaged by the UV radiation from the lamps, causing their immediate destruction.



## BENEFITS

# UVGERMI

- Low operating and maintenance costs
- Body and cabinet resistant to corrosion
- Lamp service life up to 16,000 hours
- Low load loss
- Low pressure lamps
- Low power consumption
- Made in France

## TECHNICAL SPECIFICATIONS

ACS-APPROVED UV REACTORS					
DESIGNATION	Number of lamps	Flanges Input/Output	Flow (m <sup>3</sup> /h) at 40 mJ/cm <sup>2</sup> at 98% transmittance over 10 mm	Biodosimetry standard	ACS UV no.
GERMI AP60 ACS	1	1" male tip	3.1	ÖNORM	19 UV LY 002
GERMI AD120	1	DN 80 / PN 10-16	10.9	ÖNORM	20 UV LY 003
GERMI AD200	1	DN 100 / PN 10-16	20	ÖNORM	18 UV LY 015
GERMI BD200	2	DN 100 / PN 10-16	33.9	ÖNORM	20 UV LY 004
GERMI CD300	3	DN 150 / PN 10-16	107.4	ÖNORM	15 UV LY 026
GERMI DD300	4	DN 150 / PN 10-16	143.2	ÖNORM	17 UV LY 007
GERMI HD300	8	DN 200 / PN 10	302.7	ÖNORM	20 UV LY 002
GERMI DP300 NA	16	DN 300 / PN 10	703	ÖNORM	18 UV LY 016
GERMI LD600 NA	12	DN 400 / PN 10	1000	ÖNORM	17 UV LY 008

**Vertical or horizontal installation** of the reactor

**Operating pressure:** 8 bars

**Power supply:** 230 Volts or 400 Volts TETRA 50/60 Hz (depending on the model)

**Reactor** made from stainless steel 316 L

**Quartz sleeve** highly transparent to UVc

**Cleaning** of the quartz sleeve by scraper seals (automatic or manual)

**Single-ended**, amalgam doped, low pressure UV lamps with a guaranteed service life of 16,000 hours or 2 years, whichever comes first (excluding GERMi AP60 ACS and GERMi LD600 NA)

**Electronic ballast** for UV lamp control, with pre-heating

**Painted steel** or **polyester cabinet** (aluminium box for GERMi AP60 ACS and GERMi AD120)

**UVc intensity regulation** according to flow on GERMi HD300, GERMi DP300 NA and GERMi LD600 NA

**Digital UVc intensity sensor** conform to standards (DVGW or ÖNORM) with two configurable alarm thresholds and one 4-20 mA output

**Stainless steel flange input/output** (except for GERMi AP60 ACS)

### ADDITIONAL EQUIPMENT

- Reference radiometer with calibration certificate
- Automatic fixed or mobile acid cleaning.





Do not hesitate to contact us  
for more information on our

TREATMENT SOLUTIONS OF WATER  
FOR  
**HUMAN  
CONSUMPTION**

**UVGERMI**<sup>®</sup>  
ULTRAVIOLETS DE HAUTE TECHNOLOGIE

**UVGERMI SA**, ZAC de la Nau, | **Tél.** + 33 (0)555881888 // **Fax** : + 33 (0)555881816  
19240 Saint-Viance, FRANCE | **Mail** : [contact@uvgermi.fr](mailto:contact@uvgermi.fr) // [www.uvgermi.fr](http://www.uvgermi.fr)

BANK: BP. AQUITAINE CENTRE ATLANTIQUE FR76 1090 7005 5644 2214 3140 629 /  
BIC: CCBPFRPPBDX/SIRET: 519 114 235 00012 CODE/APE 2829 B/EEC VAT: FR 54 519 114 235