

microbiological water treatment using ultraviolet reactors.

MADE IN FRANCE

DRINKING WATER TREATMENT

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

ULTRAVIOLETS DE HAUTE TECHNOLOGIE

RENTAL ACCOMMODATION

THE ISSUE

Water intended for human consumption can contain pathogenic micoorganisms: 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.

NFFDS

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.







REVIEW OF REGULATIONS

Our range of Drinking water uv disinfection units is certified according to the **ÖNORM-technical standard M5873.** This international standard is a proof of efficiency and safety of our equipment. In addition this range is also certified by the French Ministry of Health according to the Decree of 9th October 2012 (commonly referred to as "ACS UV").



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.







- 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

ÖNORM APPROVED UV REACTORS					
DESIGNATION	Number of lamps	Flanges Input/Output	Flow (m³/h) at 40 mJ/cm² at 98% transmittance over 10 mm	Biodosimetry standard	UV Approval no.
GERMI AP60	1	1" male tip	3.1	ÖNORM	24 UV NY 004
GERMI AD120	1	DN 80 / PN 10-16	10.9	ÖNORM	24 UV LY 005
GERMI AD200	1	DN 100 / PN 10-16	20	ÖNORM	24 UV LY 003
GERMI BD200	2	DN 100 / PN 10-16	33.9	ÖNORM	24 UV LY 006
GERMI CD300	3	DN 150 / PN 10-16	107.4	ÖNORM	24 UV LY 007
GERMI DD300	4	DN 150 / PN 10-16	143.2	ÖNORM	23 UV LY 001
GERMI HD300	8	DN 200 / PN 10	302.7	ÖNORM	20 UV LY 002
GERMI DP300 NA	16	DN 300 / PN 10	703	ÖNORM	24 UV LY 004
GERMI LD600 NA	12	DN 400 / PN 10	1000	ÖNORM	23 UV LY 002

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 and GERMI LD600 NA)

Electronic ballast for UV lamp control, with preheating

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 ÖNORM standards with two configurable alarm thresholds and one 4-20 mA output

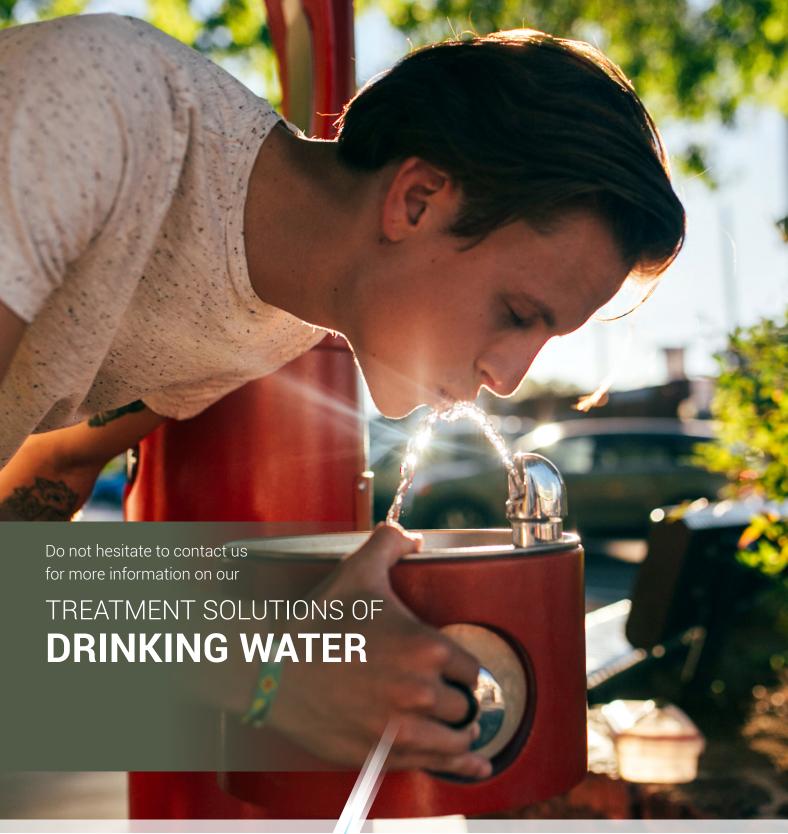
Stainless steel flange input/output (except for GERMI AP60)

ADDITIONAL EQUIPMENT

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







U/GERMI® ULTRAVIOLETS DE HAUTE TECHNOLOGIE