

UV Smart

D60

High-Level Disinfection of channel-less
endoscopes and TEE probes in 60 seconds.



 UVsmart



Increase patient turnover

with lightning fast
High-Level
Disinfection

UV Smart D60

High-Level Disinfection of channel-less endoscopes and TEE probes in 60 seconds, with a manual pre-cleaning using only water. Proven, validated and fully traceable – the D60 does it all.

Placed on the ward or integrated in the Central Sterile Services Department, the D60 is completely adaptable to your healthcare setting and brings benefit in either situation.

- » Frees up Washer Disinfector capacity for GI endoscopes at the CSSD
- » Reduces required inventory and damaged endoscopes during transport
- » Increases patient turnover and prevents rescheduling due to endoscope or probe unavailability



Impelux™ patented technology

Consistent and reliable disinfection of the full spectrum of micro-organisms.



Environmentally sustainable

Low energy use and no chemicals, refills or redundant disposables needed.



Certified and continuously validated

MDR CE Class IIa, validation of each cycle and through continuous clinical research.

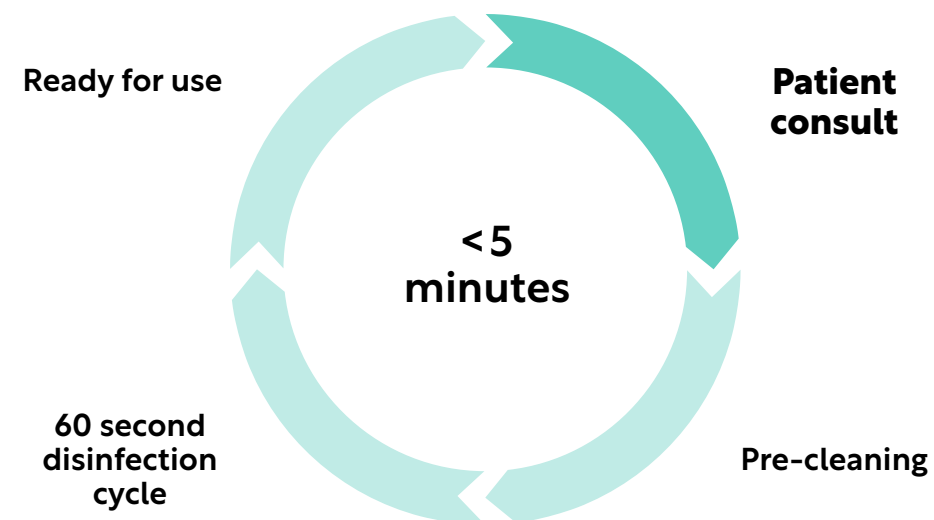


J. van Kampen
Physician Assistant ENT
Langeland Hospital, The Netherlands

We were able to reduce our reprocessing cycle from 2-3 hours, to merely minutes. The saved time is now devoted to the patients, which in the end matters most.



The new workflow



- » Full traceability with barcode and/or RFID for compliance control
- » Outperforms washer disinfector; trialed and proven in clinical setting
- » Compatible with major endoscope and probe manufacturers

PENTAX
MEDICAL

PHILIPS

XION
medical

STORZ
KARL STORZ – ENDOSKOPE

SIEMENS

Extensive material compatibility studies show UV-C light does not damage materials. In case it does occur, UV Smart will investigate and cover cost.

The **D60** adapts to your healthcare setting

Easy to use, the D60 has an intuitive interface and gives clear feedback to the user.

How to Use the **D60**

Start of the process	Scanning	Placement	Disinfection	Scanning	Hand disinfection	Disinfection successful
STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7
Pre-clean your equipment and perform a leak test.	Scan your ID and the equipment for traceability.	Place the equipment in the D60 and close the door.	Wait 60 seconds for the D60 to finish the cycle.	Scan your ID to unlock the door.	Disinfect your hands.	Take out the ready-to-use equipment.



Place the **D60**



On the ward



In the clinic



In the central sterile services department

Validated, certified, and continuously improved by clinical research

The disinfection efficacy of the UV Smart D60 has been proven by clinical research and studies conducted at renowned academic medical centers and laboratories worldwide. UV Smart performs continuous research to improve the product and its clinical file.

- » **Eurofins Scientific Laboratories** tested the D60 according to the European standard for disinfection of medical devices. The D60 reached High-Level Disinfection according to the EN-14885:2022 standard for the full spectrum of microorganisms.
- » **Spaarne Gasthuis (NL)** compared the D60 to standard washer disinfectors and concluded that the required reduction was met. The D60 showed a measurable improvement in comparison with the current state-of-the-art.
- » **Marburg University (DE)** concluded that the Impelux™ technology of the D60 efficiently reduces bacterial contamination on flexible endoscopes.
- » **A Multicentre Study led by Radboud UMC (NL)** conducted with three Dutch hospitals showed that a manual pre-cleaning of ENT endoscopes, combined with disinfection in the D60 outperforms washer disinfectors.
- » **UZ Gent hospital (BE)** found a clear decrease in the number of CFU on TEE probes after disinfection with the D60. The handle contains noticeably less germs after disinfection with the D60 than with their Soluscope washer disinfectant.
- » **NYU Langone (USA)** shows the D60 to match the efficacy of Cidex OPA in substantially less time.



UV Smart D60 Microbiological Efficacy Chart

The required reduction of micro-organisms are based on the EN 14885:2022 standard to comply to the state-of-the-art disinfection methods and levels.

Claim	Micro-organism	Sort and type	Log reduction
Bactericidal	Staphylococcus aureus	Gram-positive bacteria, vegetative	≥ 5,0
	Enterococcus hirae	Gram-positive bacteria	≥ 5,0
	Pseudomonas aeruginosa	Gram-positive bacteria, vegetative	≥ 5,0
	Escherichia coli	Gram-positive bacteria, Enterobacteriaceae	≥ 5,0
Fungicidal	Candida albicans	Fungus, vegetative yeast	≥ 4,0
	Aspergillus brasiliensis	Fungus, spore	≥ 4,0
Yeasticidal	Candida albicans	Fungus, vegetative yeast	≥ 4,0
	Candida auris	Fungus, yeast	≥ 4,0
Sporicidal	Bacillus subtilis	Gram-positive bacteria, endospore	≥ 4,0
Mycobactericidal	Mycobacterium avium	Gram-positive mycobacteria, vegetative	≥ 4,0
	Mycobacterium terrae	Gram-positive mycobacteria, vegetative	≥ 4,0
Tuberculocidal	Mycobacterium terrae	Gram-positive mycobacteria, vegetative	≥ 4,0
Viricidal	Poliovirus type 1, LSc-2ab (Picomavirus)	Enterovirus	≥ 4,0
	Adenovirus type 5, strain Adenoid 75	Adenoviridae	≥ 4,0
	Murine Norovirus, strain S99 Berlin	Caliciviridae	≥ 4,0
	Polyomavirus SV40, strain 777	Incertar sedis	≥ 4,0



The D60 records all reprocessing data

Full auditable traceability options by either barcode, RFID or manual entry

Always

- » Cycle (un)successfulness including parameter values (time, UV-C Dose and Power)

Optional

- » Endoscope and/or probe identification number
- » Employee identification for insertion and extraction authorization
- » Leak test and pre-cleaning verification

When the D60 is set up as a standalone device, all information can be extracted via USB or viewed on the display. Registration requirements are customizable to your facility's protocol for flexible integration.



UV Soft



HIS



Connectivity

When the D60 is connected to your facility's intranet, the reprocessing information can be viewed on a desktop-installed license of UV Soft or sent to the Hospital Information System (HIS). This way, you are always up-to-date and auditable.



Service Life and Maintenance

The D60 has a service life of 10 years. After every 12 months of use, the device requires maintenance and will prompt a notification on the display. All replacement parts and maintenance activities are included in the service agreement offered by your local distributor.

The prescribed service agreement includes:

-  Annual service and maintenance with minimal downtime guarantee (Current installed base has >99% uptime)
-  Replacement of critical wear parts during maintenance
-  Sensor function check and value calibration
-  (Technical) training for safe and effective use

2-year warranty does not include wear parts replaced during maintenance



The way to sustainability starts now



UV Smart signed the European Green Deal, committing to reducing net Greenhouse Gas emissions by at least 55% by 2030.

UV Smart designs all products with sustainability in mind. Long product life, durable materials, close to home sourcing and manufacturing, low power consumption and minimal consumables are at the core of all products.

The biggest win starts when the products are put in practice:

-  With a power consumption of only 0.01 kWh per cycle, **the D60 consumes over 30x times less energy** than an average Washer Disinfector.
-  A disinfection cycle in the **D60 uses no water or chemicals**, saving in the chemical supply chain, the use of fresh water and the necessity of filtering polluted water.
-  **The D60 is harmless to materials**, which is beneficial to the longevity of equipment and reduces (logistics for) repairs and premature disposal.

We value partners that share the same commitment and work closely together to reach a common goal. This way we reduce carbon footprint throughout the entire product chain.

D60 Accessories



Validation stickers

Insert disinfection sticker for visual validation of every disinfection cycle and store in physical logbook.



Validation tool

UV Smart advised tool and protocol for periodic validation of product and sensor.

D60 Technical Specifications

Product name (brand name)	D60 (UV Smart)
Type of unit	D60 UV-C Medical Disinfection Device
Classification (acc. to IEC/EN 60601-1)	Protective Class I
Class (acc. to MDR)	Ila
Ingress Protection	IP 20
Voltage rating	110–220V
Frequency	50/60Hz
Amperage rating	5A
Max. power rating	650W
Wavelength	253.7nm
Accessible fuse value	230V: 5A time-lag fuse (ø5×20mm)
EMC	IEC/EN 60601-1-2 / 61000-3-2 / 61000-3-3
Product lifetime	10 years

Operating conditions

Relative humidity	5% - 90% (without condensation)
Temperature	0°C - +40°C
Atmospheric pressure	700hPa - 1060hPa

Transport and storage conditions

Relative humidity	5% - 90% (without condensation)
Temperature	-20°C - +45°C
Atmospheric pressure	700hPa - 1060hPa
Weight	Approx. 100kg
Dimensions (WxHxD)	861mm x 2033mm x473mm (closed)
IT connection type	Ethernet Cable
Track & Trace	Retrievable via UV Soft and D60 internal memory
Technical inspection (service/maintenance)	Every 12 months



Frequently Asked Questions

Our Customer Success team is happy to answer all your questions.



Q: Can I disinfect Gastrointestinal endoscopes in the D60?

A: Since Gastrointestinal endoscopes have working channels, they cannot be disinfected in the D60. The D60 is only intended for endoscopes and probes without working channel, because the D60 only disinfects outer surfaces.

Q: Does the D60 require special installation or connections?

A: No, the D60 only requires a 110V/220V power socket to be used. In case the D60 is connected to the facility's intranet for additional traceability, an ethernet cable is required.

Q: Do more than one endoscope fit in the D60 during disinfection?

A: No, to make sure the endoscopes are disinfected properly, only 1 endoscope can be disinfected at a time. Due to the 60 second disinfection cycle, this hardly impacts the turnaround time and is ideal for pre-cleaning the next endoscope.

Q: Does the D60 affect the endoscope/probe?

A: Extensive material studies have been performed on a wide variety of endoscopes and probes, showing no deterioration with disinfection in the D60. The lens quality even proved to remain better compared to chemicals and washer disinfectors. The only noticeable side-effect is a slight discoloration of white/light-colored plastics, without affecting any other structural material properties.

Q: Can I disinfect rigid endoscopes in the D60?

A: Yes, channel-less rigid endoscopes can be disinfected in the D60.

Q: Do I need to pre-clean the endoscope?

A: Yes, pre-cleaning must be done before disinfecting the endoscope in the D60. A damp cloth with water suffices to remove any soil from the endoscope.

Please contact
us for more
information



UVsmart

@ info@uvsmart.nl

in uvsmart - emea

+31 (0)85 060 98 00

DOC-1615 REV 5

2023 UV Smart Technologies B.V.
All mentioned trademarks and
registered trademarks are the property
of UV Smart Technologies B.V. All rights
reserved. No part of this document
may be reproduced in any form
without written permission from the
copyright holder.

Distributed by:

Company name

Country

Street name

Website

Postal code

Email

City

Phone number

MDR Class IIa

DISCLAIMER

The information contained herein is meant to describe the use of the product(s) and is not intended to provide advice on medical procedures. UV Smart Technologies B.V. makes no representations or warranties whatsoever as to the accuracy, completeness, or suitability for the purpose of the information/training. Products and specific indications might be unavailable in certain markets, given that product availability is subject to regulatory approval (and/or medical practices in individual markets). The healthcare provider is responsible for the clinical implementation of UV Smart products. The instructions for use and accepted medical guidelines should always be checked prior to the application of UV Smart products.

