

WEDECO · OPEN-CHANNEL UV FOR LOW-UVT WASTEWATER, STORMWATER AND REUSE

WEDECO Duron 8

High-power open-channel UV system for low-UVT effluent, high-dose reuse and deep-channel retrofits.



Overview

WEDECO Duron 8, launched in 2022, is an open-channel UV disinfection system built on the Duron 6 concept and optimised for wastewater with lower UV transmittance or a high dose requirement, such as stormwater treatment and water reuse. Its 800 W Ecoray lamps put more UV power into each module, so fewer lamps and fewer channels handle the same flow. It suits deep channels, which makes it a strong option for converting chlorine contact basins to chemical-free UV disinfection.

Ozone UV Solutions supplies Duron 8 systems as an authorised WEDECO reseller and supports them locally: sizing, installation, commissioning, servicing, lamps and spare parts.

Key features

- Ecoray 800 W UV lamps and ballasts in a flexible module lamp arrangement
- High flow capacity per channel, for fewer channels and lower installation cost
- Third-party validated to the US EPA UVDGM and NWRI, with built-in redundancy
- Automatic, low-maintenance, chemical-free sleeve cleaning
- Integral manual or automatic module lifting, no crane; maintenance-free electric drives
- App-based remote connectivity for monitoring and troubleshooting on a mobile device

Design and operation

More power, fewer lamps

The 800 W Ecoray lamps and the flexible lamp arrangement in each module allow more efficient designs. Fewer lamps means fewer parts to replace and a smaller electrical installation.

Deep channels and retrofits

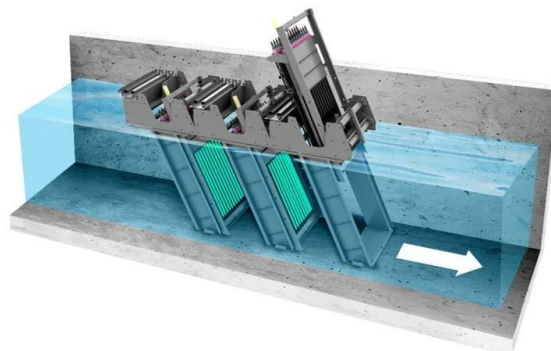
Duron 8 is highly customisable and suits deeper channels, such as chlorine contact chambers, as well as new plant installations. Adjustable mounting bars accept wider channel tolerances, for faster installation.

Electrical installation

Fewer control boxes, smart cable routing and a reduced cabinet footprint cut electrical work and save space on larger systems.

Maintenance and monitoring

Improved access to components and integral module lifting make routine work quicker. Cleaning is automatic and chemical-free. App-based connectivity gives operators system status and alarms on a mobile device.



Typical applications

- Wastewater effluent with low UV transmittance
- Stormwater treatment
- Water reuse and other high-dose applications
- Conversion of chlorine contact basins and other deep channels to UV

Supplied and supported by Ozone UV Solutions

System selection and UV dose sizing · Installation and commissioning · PLC/SCADA integration · Planned servicing and lamp changes · Genuine WEDECO lamps, spare parts and consumables · 24/7 technical support line
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Model selection

Duron systems are engineered to order rather than chosen from a list of fixed models: the number of channels, banks, modules and lamps comes from a validated dose calculation for your flow, water quality and discharge standard. The table below compares the two Duron models.

Duron range at a glance

	Duron 6	Duron 8
UV lamps	Ecoray low-pressure high-output amalgam, 600 W	Ecoray, 800 W
Lamp arrangement	Vertically inclined at 45°, lamp length 1.4 m	Flexible module lamp arrangement, based on the Duron 6 concept
Best suited to	Small to medium flows and head loss; shallower channels, including retrofit of horizontal UV channels	Lower UV transmittance or high UV dose (stormwater, reuse); deep channels such as chlorine contact chambers
Flow per channel	Set by sizing	Higher than Duron 6; fewer channels for the same flow
Third-party validation	NWRI and US EPA UVDGM	NWRI and US EPA UVDGM
Module lifting	Manual or automatic, no crane	Integral lifting, manual or automatic, no crane
Remote access	–	App-based monitoring and troubleshooting on a mobile device
Field record	Over 10 years of installations	Launched 2022

What we need to size a Duron system

Design input	Why it matters
Peak and average flow	Sets the number of channels, banks and lamps
UV transmittance (UVT) of the effluent	Low UVT needs more UV power per unit of flow
Required dose or discharge / reuse standard	Fixes the validated dose the design must deliver
Channel width, depth and water level range	Decides the module and bank layout, and whether a retrofit fits
Effluent type and fouling potential	Decides the sleeve-cleaning option and design margins
Power supply and cabinet location	Indoor or outdoor cabinets, cable routing

Options are shown in [square brackets]. Duron 8 is the higher-power model of the Duron range; where UVT is higher and channels are shallower, Duron 6 may suit better. We size both and recommend the better fit.

Common specifications

UV LAMPS & MONITORING	
Lamp type	Ecoray, 800 W, with matched Ecoray ballasts
Lamp arrangement	Flexible module lamp arrangement
Validation	US EPA UVDGM and NWRI, third-party · built-in redundancy
Remote access	App-based monitoring and troubleshooting via mobile device
UV MODULES & CHANNEL	
Installation	Open concrete channel: new plant, or retrofit of deep channels such as chlorine contact chambers
Mounting	Adjustable mounting bars for wider channel tolerances
Sleeve cleaning	Automatic, chemical-free
Module lifting	Integral, manual or automatic, no crane
Drives	Electric, maintenance-free, no hydraulic oil
ELECTRICAL	
Cabinets	Reduced cabinet footprint on larger systems · fewer control boxes · smart cable routing

Request sizing or a quote

Send us your peak and average flow, effluent UV transmittance, the required dose or reuse standard and your channel dimensions. We will size the system, compare Duron 8 with Duron 6 for your site and quote supply, installation and ongoing service.

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Specifications subject to change without notice.