CompactClean, OptIMO, IECEx, Low Skid Mounted

The CompactClean OptIMO BWMS has been designed for vessels trading globally or primarily in IMO regulated waters. The CompactClean OptIMO BWMS provides optimized performance in IMO waters combined with reduced flowrate in US territories. If your vessel trades primarily outside of US waters in International Maritime Organization (IMO)-regulated waters, we can offer the CompactClean OptIMO system for ballast water management.

Dual mode software: IMO and USCG mode

The CompactClean OptIMO system is designed and tested according to the MPN testing methods under IMO. It means that the CompactClean OptIMO BWMS deploys an optimized and energy saving UV reactor to treat the ballast water, based on the same proven and high-quality technology as the well-known DESMI CompactClean BWMS. This is proved by the CAPEX and OPEX savings.

Even though CompactClean OptIMO is optimized for full flow in IMO waters, it can still be used in USCG waters at approximately 75% of max flowrate. Thus, if the unit size handles 1000 m³/h of water in IMO waters, it will handle 750 m³/h of water in USCG waters. The dual-mode software takes care of the correct treatment scheme after the operator chooses the operation mode. The destination port will determine whether the system should operate in IMO or USCG mode.

CompactClean
OptIMO can, like
CompactClean,
handle water
with low UV
transmissions
rates of just 40%
in US territory.
Furthermore,
CompactClean



OptIMO has been certified to treat ballast water with UV transmission at record-breaking 35% in IMO mode.

ECEX Approved SAFETY ON BOARD ANY SHIP

- INCLUDING OIL AND CHEMICAL TANKERS
The CompactClean BWMS is available in an ATEX and IECEX certified version, making installation in hazardous zones on board oil, chemical or gas tankers possible. The EX certification notation is:

Ex II 2G Ex IIB T4 Gb And based on the following components:

Uv sensor: Ex ia
Temperature: Ex ia
Pressure: Ex ia
Water level: Ex ia
Junction Box: Ex d
Valve: Valves: Ex d

Pumps (mechanical ATEX approval)

Flow Meter: Ex d ia [ia]

UV lamp assembly: Ex d

DESMI guarantees a distance of up to 100 m / 328 ft. between the main panel and the Ballast Water Management System.

Low Skid Mounted Delivery

The low skid mounted configuration has been optimized for deckhouse installation or other areas where height is the primary concern. The flatter design has been made to avoid a tall structure on deck. This flat design has been possible by s-folding the piping between the filter and UV-unit. This will of course add more piping and require a larger footprint. The low skid mounted IECEx system can be delivered without the house as a stand-alone low skid.



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Description	OptIMO 340	OptIMO 500	OptIMO 750	OptIMO 1000	OptIMO 1500	OptIMO 2100
IMO Mode Max Flow [m³/h] - Ballast	340	510	750	1040	1500	2100
IMO Mode Max Flow [m³/h] - De-Ballast	370	510	750	1200	1650	2500
USCG Mode Max Flow [m³/h] - Ballast	250	340	500	870	1180	1740
USCG Mode Max Flow [m³/h] - De-Ballast	250	340	500	870	1180	1740
Minimum Flow Ballast [m³/h] Filter	45	50	92	95	126	126
Minimum Flow De-Ballast [m³/h] UV unit	6	6	13	19	26	38
Min Power required UV-T > 100% UV lamps dim to 38% [kW]	13,7	18,2	27,4	41,0	54,7	43.2
Avg. Power required UV-T = 85% UV lamps dim to 70% [kW]	25,2	33,6	50,4	75,6	100,8	129.6
Install Power required UV-T < 62% All components running [kW]	54,0	67,0	03,0	131,0	0'691	245.0
Maximum Current At 440V [A]	73,0	106,0	126,0	177,0	229,0	332
Main Cabinet L x W x H [mm] Weight [kg]	606 x 594 x 1795 mm 262 kg	606 x 594 x 1795 mm 272 kg	606 x 679 x 2171 mm 349 kg	1206 x 579 x 1771 mm 498 kg	1203 × 700 × 2208 mm 677 kg	1203 × 700 × 2208 mm 788 kg
Skid L×W×H [mm] Weight [kg]	1726 x 1279 x 2414 mm 1797,7 kg	1955 x 1300 x 2644 mm 2128,5 kg	2000 x 1342 x 2912 mm 3006,5 kg	2250 x 1461 x 3294 mm 3315 kg	2307 x 1500 x 3672 mm 4521 kg	upon request

