



Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer Opsis AB

Address Box 244, Furulund, 244 02, Sweden

Type Fire And Gas Detection Alarm And Control Systems

Description Gas measuring system using UV and IR reference methods

Item description	Marine designation	Land based designation
Cabinet	AC180M	-
	AC181M	-
Power Supply	PS150-01M	-
Analyser	AR600M	-
	AR620M	AR602Z/N
	AR650M	AR650/N
Optical Fibre Cable	OF60R	-
	OF100B	-
Emitter/Receiver	ER060M *)	-
	ER062M *)	-

Trade Name Opsis M800

Application Marine, offshore and industrial applications for use in environmental categories ENV1, ENV 2 and ENV3 as defined in Lloyd's Registers Type Approval System, Test Specification Number 1- 2013.

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Components marked *) intended for use in category ENV4.

Specified Standard

Manufacturer's Standard A41, Issue 10 2018
IACS unified requirements E10 (Rev.9 Aug 2023)
MEPC.340(77), Chapter 6

Other Conditions

Application only for use in "General Power Distribution Zones".
The "OPSIS 800M" shall be installed, calibrated and operated in compliance with the manufacturer's instructions and in accordance with the requirements and intervals as specified in Revised MARPOL Annex VI and NTC 2008.
The ambient temperature for the cabinet should not exceed 45 °C at any time. The exhaust gas temperature for the measuring point equipment should not exceed 600°C.
The M800 system is to be inspected and calibrated (including zero and span calibration, the change of light source and a wavelength precision check) by an OPSIS representative once a year to ensure full functionality.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: LR21299247TA

The Design Appraisal Document TSO-25-048877/TW and its supplementary Type Approval Terms and Conditions form part of this Certificate.