TÜVRheinland®
Precisely Right.

CONFIRMATION

of Product Conformity (QAL1)

Certified AMS:	O342e* resp. O342e for Ozone
Manufacturer:	ENVEA 111, Boulevard Robespierre 78304 Poissy Cedex France
Test Institute:	TÜV Rheinland Energy & Environment GmbH

This is to certify that the AMS has been tested and found to comply with the standards VDI 4202-1 (2018), EN 14625 (2012), EN 14625 (2024) as well as EN 15267-1 (2009) and EN 15267-2 (2023).

The AMS underwent independent expert testing and was accepted.
This confirmation is valid up to the publication of the certificate, but no longer than 6 months from the date of issue
(this certificate contains 4 pages).

This confirmation is valid until: 30 April 2026

TÜV Rheinland Energy & Environment GmbH
Cologne, 4 July 2025

i. V. Dipl.-Ing. G. Baum

i. A. Dipl.-Ing. C. Röllig

www.umwelt-tuv.eu
tre@umwelt-tuv.eu
Tel. + 49 221 806-5200

TÜV Rheinland Energy & Environment GmbH
Am Grauen Stein
51105 Köln

Test report: 936/21225396/B dated 26 February 2016 and Addendum EuL/21264142/C dated 7. February 2025

Approved application
The tested AMS is suitable for continuous immission measurement of Ozone in stationary use.

The suitability of the AMS for this application was assessed on the basis of a laboratory test and a three month field test.

The AMS is approved for an ambient temperature range of 0 °C to +40 °C.

The notification of suitability of the AMS, performance testing and the uncertainty calculation have been effected on the basis of the regulations applicable at the time of testing. As changes in legal provisions are possible, any potential user should ensure that this AMS is suitable for monitoring the measured values relevant to the application.

Any potential user should ensure, in consultation with the manufacturer, that this AMS is suitable for the intended use.

Basis of the certification

This certification is based on:

- Test report 936/21225396/B dated 26 February 2016 of TÜV Rheinland Energie und Umwelt GmbH and Addendum EuL/21264142/C dated 7. February 2025 of TÜV Rheinland Energy & Environment GmbH
- Suitability announced by the German Federal Environment Agency (UBA) as the relevant body
- The ongoing surveillance of the product and the manufacturing process

Notice on the notices of the Federal Environment Agency of 14 July 2016 (BAnz AT 01.08.2016 B11, Chapter III number 1.1) and of 02 April 2025 (Banz AT 19.05.2025 B3, Chapter IV, 86th notice).

The current software version for the O342e*/O342e measuring system for ozone from ENVEA is

v1.3.a

From software version v1.3.a, the measuring system fulfils the requirements of EN 14625 (edition 2024). An addendum to the test report with the report number EuL/21264142/C can be viewed on the Internet at www.qal1.de.

Statement by TÜV Rheinland Energy & Environment GmbH dated 20 May 2025

Tested product

This confirmation applies to automated measurement systems conforming to the following description:

The ambient air monitor O342e* is a continuous ozone monitor. The measurement principle is based on ultraviolet absorption. The instrument was developed for the continuous measurement of ozone concentrations in ambient air.
The measurement principle of the O342e* is based on UV photometry according to the Beer-Lambert law. The absorption spectrum of ozone has its maximum in the wavelength range of 250 to 270 nanometres. The monochromatic UV-LED light source of the O342e* is adjusted to a wavelength of 255 nm and therefore within the maximum absorption range of ozone.

The O342e* analyser uses non-dispersive ultraviolet (UV) absorption technology to measure ozone concentrations. The sample to be analysed is led to the measurement module via a dust filter. The measurement module consists of the following parts:

- LED for monochromatic UV light with a wavelength of 255 nm, placed under a protective cover, which is fastened with 4 screws. The LED card is directly connected to the card of the reference photodetector.
- two photodetector cards: the reference photodetector card for measuring the energy of the incoming LED light (UV0) and the photodetector card for measuring UV absorption, which enables detection of signals i and i_0. Both cards are mounted beneath a protective cover to protect them against interfering light.
- the optical chamber consists of a beam splitter and a convex, flat lens for concentrating the light on the reference photodetector. In the optical chamber, the LED light can be distributed to reference photodetector and measuring chamber.
- a measurement chamber consisting of a glass tube and two mechanical parts at the inlet and outlet where the LED light is absorbed. The optical path length for the sample gas is 400 mm.
- cycle solenoid valve by means of which the sample gas can either cyclically or alternately be changed over to cycle channel i or cycle channel i_0.
- a flow restrictor which regulates the sample gas flow to 55 litres/hour. The excess flow valve is mounted at the fluid outlet of the measurement chamber.
- ozone filter which can filter out any trace of ozone from the sample gas
- connection for the pressure sensor
- Type PT1000 temperature sensor
- gas inlet

The AMS is available in two versions:

- The version O342e is fitted with a TFT LCD coloured display with backlight and a touch screen function. Signal output as well as operation can also be carried out via the web browser using an external PC connected via Ethernet.
- The version O342e * is not fitted with a display. Signal output as well as operation can only be operated via the web browser on an external PC connected via Ethernet.

Apart from that, both versions of the AMS are of identical design.