

Process observation and visual control systems

lumiglas

Package solutions for biogas production



Remote monitoring using Ex-type cameras with all components required by manufacturers and operators of biogas plants

PAPENMEIER

System solutions for monitoring biogas processes

The safety regulations stipulated by agricultural professional associations require, among other things, that sight glass fittings and electrically operated facilities used in the production of biogas are gas-tight and explosion protected.

Benefit from Papenmeier's long experience in the production of electrical plant that meets the highest demands on explosion protection.


With the VISULEX Ex camera system from the renowned Lumiglas product range, safety has top priority.

Data for monitoring and analysing purposes is transmitted by the remotely controlled camera from any desired position. Remotely operated disc wipers with spray nozzle ensure an unobstructed view.

The Lumiglas system package is a unit consisting of:

1. VISULEX Ex camera technology

VISULEX Ex camera technology – Sony colour camera 1/4" CCD sensor, zoom lens 4.6" – 46", focal length 4.2 – 42 mm, light sensitivity 1.5 lux, installed in a Lumiglas VISULEX Ex housing, approved to EC type examination certificate:

 II 2G Ex d IIC T6 Gb
II 2D tb IIIC T80°C Db


Zones 1 and 2;
Zones 21 and 22

Signal transmission with two-wire system up to 500 m, cable (3 x 2 x 0.56 mm²), power supply, camera control and video signal in one cable.

- Control unit, cabinet pre-installed for up to six cameras
- Video server with 100/1000 Mb/s Ethernet interface (optional), TCP/IP logger, Active X, Resolution 720 x 576 pixel, Image transmission in PAL video format.
- LumiCam software for controlling the following camera functions: zoom, focus, aperture, shutter, gain, preset positions, date and time, plus image storage.

2. Lumiglas Ex luminaire, e. g.


ESL 55 LED Ex, approved to EC type examination certificate

 II 2G Ex d IIC T6 Gb
II 2D tb IIIC T80°C Db

Zones 1 and 2; Zones 21 and 22

3. Lumiglas disc wiper mechanism with drive motor, approved to EC type examination certificate

PTB 03 ATEX 1131

 EEx d IIC T5

Zones 1 and 2; Zones 21 and 22

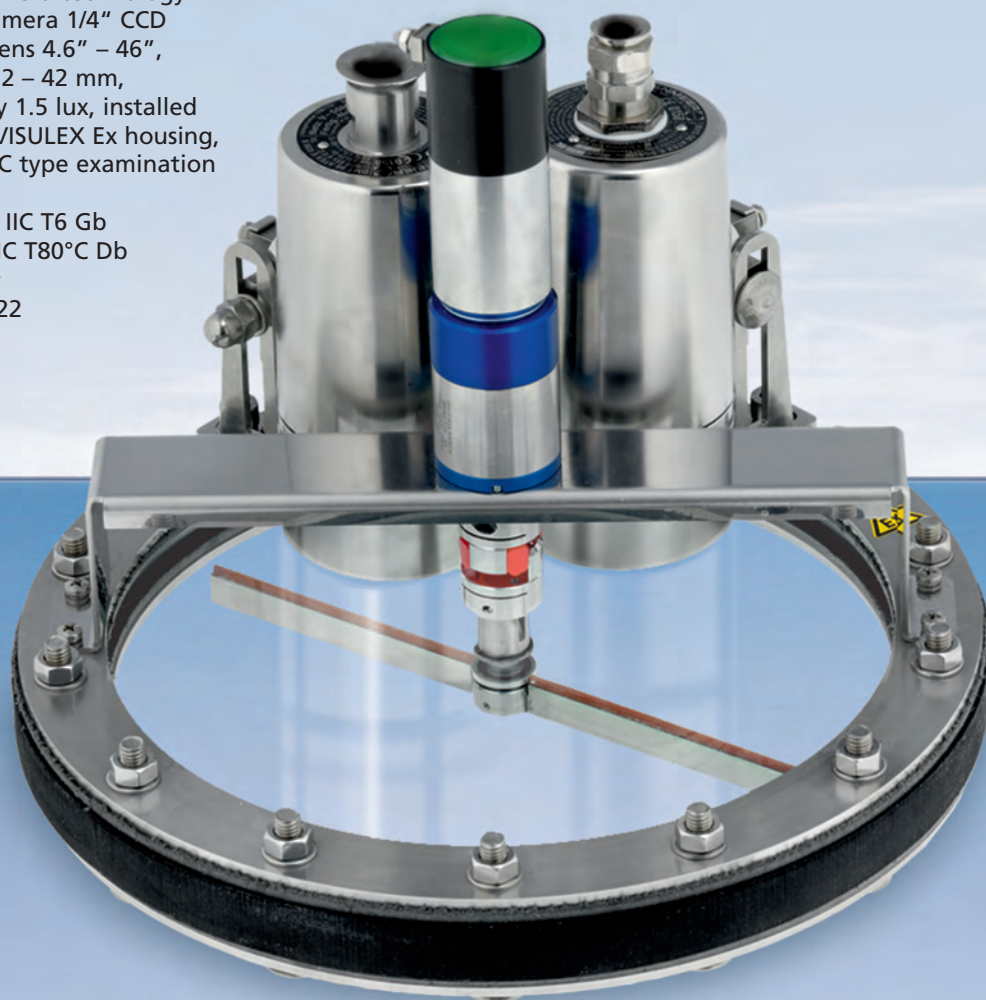
4. Lumiglas sight glass fitting

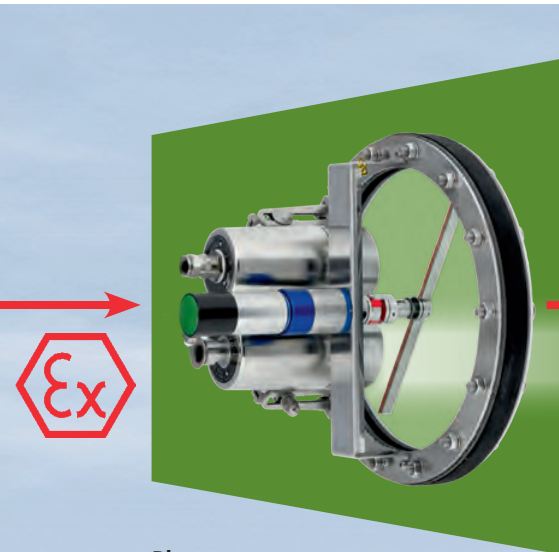
as a support for attaching equipment, made of steel with sight glass for mounting on the fermenter, complete with sealing ring and spray device.

The sight glass fitting can also be mounted in other positions to suit individual requirements.

Further information on other configurations and the individual components is available at e-mail address: info@lumiglas.de or simply call +49 (0)2304 205-0.

Technical data sheets can be accessed at www.lumiglas.de.





Plant operators
can choose from
two package solutions:

**Small package solution
for local observation:**

- Sight glass fitting with disc wiper (bull's eye)
- Electric motor for disc wiper
- Luminaire
- Camera
- Control unit
- Monitor

**Large package solution
for global observation:**

- Sight glass fitting with disc wiper (bull's eye)
- Electric motor for disc wiper
- Luminaire
- Camera
- Control unit
- Video server
- LumiCam software (Active X interface)
- Standard PC



Foto: Fachverband Biogas e.V.



Large package solution

Small package solution



WWW

The continuous monitoring of biogas production processes has become an increasingly important control factor for plant operators.

The resulting requirements are met with Lumiglas by Papenmeier – specialists in the field of Ex-protected cameras and luminaires – with specifically developed supplementary components.

Lumiglas package solutions provide you, the plant operator, with the ideal method for continuously observing and documenting the entire gas production process - from fermentation to biogas formation - and even linking it to subsidiary process data. This is possible from a single command position wherever you want, either locally or anywhere in the world.

The standard solution meets most requirements.

But, as you yourself know, a standard solution is only as good as its individual adaptation.

Reason enough for us to look forward to hearing from you so that we can work out the ideal solution for your specific need.

You will find your local Lumiglas agency listed on our website www.lumiglas.de at Contact/Sales Network Worldwide

Member of
Fachverband Biogas e.V.



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