



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

| | | | |
|---------------------|--|-------------|--------------------------------------|
| Certificate No.: | IECEx EXV 22.0032X | Page 1 of 3 | Certificate history: |
| Status: | Current | Issue No: 0 | |
| Date of Issue: | 2023-02-15 | | |
| Applicant: | Tecnovideo Srl via A. De Gasperi, 3 Villaverla (VI) 36030 Italy | | |
| Equipment: | TX Series of Camera Enclosures and Pan and Tilt Unit | | |
| Optional accessory: | | | |
| Type of Protection: | Ex db, tb | | |
| Marking: | Ex db IIC T6/5/4 Gb Ex tb IIIC T85/100/135°C Db $-60^{\circ}\text{C} \leq T_{amb} \leq +60/75/80^{\circ}\text{C}$ When populated with IR spotlight models: Ex db IIC T5/4 Gb Ex tb IIIC T100/135°C Db $-60^{\circ}\text{C} \leq T_{amb} \leq +40/60^{\circ}\text{C}$ | | |

Approved for issue on behalf of the IECEx
Certification Body:

Sean Clarke CEng MSc FIET

Position:

Certification Manager

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

ExVeritas Limited
Units 16-18 Abenbury Way
Wrexham Ind. Est.
Wrexham LL 139UZ
United Kingdom





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Certificate No.: **IECEx EXV 22.0032X**

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Date of issue: 2023-02-15

Issue No: 0

Manufacturer: **Tecnovideo Srl**
via A. De Gasperi, 3
Villaverla (VI) 36030
Italy

Manufacturing
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-1:2014-06](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[GB/EXV/ExTR22.0058/00](#)

Quality Assessment Report:

[GB/EXV/QAR15.0001/02](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The equipment is constructed from stainless steel and consists of a camera enclosure and optional pan and tilt unit. The camera enclosure has the option of either toughened glass, IR germanium or sapphire windows. The IR models are supplied either with or without a fixed window guard. Window guard for sapphire windows versions is optional. The windows are cemented into the window frame end caps using a silicone-based cement.

The pan and tilt unit can be fitted with either a single or dual camera enclosure. The camera enclosure can be either fitted to the pan and tilt unit or standalone. The camera enclosure can be fitted with any make of camera that will fit within the physical constraints of the enclosure and has the option to have a wiper motor fitted.

Model numbers are detailed on the certificate annex:

SPECIFIC CONDITIONS OF USE: YES as shown below:

- Flamepaths are not for modification or repair.
- All cover fasteners are property class A4-70.
- Cable entry temperature can exceed 70°C – select suitable cable and gland for the end application.
- For fixed installation - part of the enclosure may be capable of generating electrostatic charges under certain extreme conditions. The user should ensure that the equipment is not installed in a location where it may be subjected to external conditions (such as high-pressure steam) which might cause a build-up of electrostatic charges on non-conducting surfaces. Additionally, cleaning of the equipment should be done only with a damp cloth.
- The camera must be installed in an area of low risk of impact.

Conditions for Use (Manufacturers responsibility)

- The power dissipated within the camera housing shall not exceed 25W (or 40W in case of redundant thermal protection set to open no higher than 35°C).
- The motor housing enclosures must be fitted with suitable thermal limiting devices as defined on the associated drawings.
- When a fibre optical cable is used on the equipment it shall be suitably protected against mechanical damage external to the equipment (wire armoured cable, fitted in conduit, within a cable tray etc) in accordance with IEC/EN 60079-14
- The cross-sectional area occupied by the internal equipment within the camera housing shall not exceed 60%.
- When coin cells are fitted the equipment must be marked for limited use at -40°C.

Routine Tests

- The manufacturer must carry out routine pressure tests to a value no less than 22.9 Bar on each camera and pan and tilt housing to ensure the equipment's capability to withstand overpressure.

Annex:

[IECEx EV22.0032X Annex Template.pdf](#)

| Description Continued: | |
|--|---|
| Model numbers detailed as: | |
| PTZ units/camera stations: TXP(n)(a) | Camera stations: TX(a)(n)(b)(c)(d) |
| Meaning: TXP : Pan & Tilt unit/PTZ camera station | Meaning: TX : camera housing |
| n: number of camera housing(s) or bracket(s). It can be: 0: one bracket 1: one camera housing 2: two camera housings 3: one camera housing and one bracket 4: two brackets | a: it can be: C: P&T camera housing (blank cover) F: fixed camera housing H: P&T camera housing with rear cover n: it can be: 0: camera version 1: IR spotlight version 2: WIFI version b: window version. It can be: 0: glass window without wiper 1: glass window with wiper 2: germanium window 3: germanium window without protective guard 4: sapphire window 5: sapphire window (tilted) |
| a: cable entries. It can be: A: 2x M20 B: 2x 3/4" C: 2x M25 D: 1x M20 E: 1x 3/4" F: 1x M25 G: 1x M20 + 1x M25 H: 1x M20 + 1x 3/4" I: 1x M25 + 1x 3/4" | c: cable entries (only for TXF and TXH version). It can be: A: 2x M20 B: 2x 3/4" C: 2x M25 D: 1x M20 E: 1x 3/4" F: 1x M25 G: 1x M20 + 1x M25 H: 1x M20 + 1x 3/4" I: 1x M25 + 1x 3/4" J: 3x M20 N: 3x 3/4" O: 3x M25 P: 4x M20 Q: 4x 3/4" R: 4x M25 T: up to 4 cable entries with different threads, shown near cable entries d: length. It can be: S: short M: medium L: long |

| Manufacturer's documents: | | | |
|--|--------------|-----|------------|
| Title: | Drawing No.: | Rev | Date: |
| Scheduled Drawing TXF (V3) | SD00081 | 00 | 25/01/2023 |
| Scheduled Drawing TXPTZ Upper Body (V3) | SD00082 | 00 | 25/01/2023 |
| Scheduled Drawing TXFIR (V3) | SD00083 | 00 | 25/01/2023 |
| Scheduled Drawing TXPTZ Lower Body (V3) | SD00084 | 00 | 25/01/2023 |
| Scheduled Drawing TXPTZD Internal Volumes (V3) | SD00085 | 00 | 11/11/2022 |
| Scheduled Drawing TXFP (V3) | SD00086 | 00 | 25/01/2023 |
| Scheduled Drawing TXFIRP (V3) | SD00087 | 00 | 25/01/2023 |
| Scheduled Drawing Ex Marking Plate ATEX-IECEx (V3) | SD00093 | 00 | 11/11/2022 |
| Scheduled Drawing Battery (V3) | SD00097 | 00 | 25/01/2023 |
| Minimum requirements for installation manuals | SD00098 | - | 25/01/2023 |