



Physical Technical Testing Institute
Ostrava – Radvanice



EC-Type Examination Certificate

(1)

(2)

Equipment or Protective Systems Intended for Use
in Potentially Explosive Atmospheres
(Directive 94/9/EC)

(3) EC-Type Examination Certificate Number:

FTZÚ 12 ATEX 0067

(4) Equipment or protective system: **CCTV Video System ESPO-1**

(5) Manufacturer: **Elok-Opava spol. s r.o.**

(6) Address: **Sádek 17, 747 75 Velké Heraltice, Czech Republic**

(7) This equipment or protective system and any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The Physical Technical Testing Institute, notified body number 1026 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report N°:

12/0067 dated 01.04.2015

(9) Compliance with Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012; EN 60079-11:2012; EN 60079-26:2007, EN 50303:2000

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-Type Examination Certificate relates only to the design, examination and testing of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

(12) The marking of the equipment or protective system shall include following:



I M1 Ex ia I Ma, II 1G Ex ia IIC T4 Ga camera
I (M1) [Ex ia Ma] I, II (1)G [Ex ia Ga] IIC control box

This EC-Type Examination Certificate is valid till: **01.04.2020**

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 01.04.2015

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FTZÚ, s.p., Pikartská 1337/7, 716 07 Ostrava-Radvanice, Czech Republic,
tel +420 595 223 111, fax +420 596 232 672, ftzu@ftzu.cz, www.ftzu.cz



**Physical Technical Testing Institute
Ostrava – Radvanice**

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Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 12 ATEX 0067**

(15) Description of Equipment or Protective System:

Image Transfer System ESPO 1 is complexly system for transfer PAL video signal from camera in explosive atmosphere to the control box for video processing outside explosive atmosphere. System consists of camera, connecting cable and control box. Camera is placed into stainless steel enclosure. Associated apparatus control box is designed to supply camera and to process video signal.

Intrinsically safe parameters:

Power supply:

$$U_m = 230 \text{ V}$$

Control box:

$$U_o = 4.38 \text{ V}, I_o = 3.25 \text{ A}, C_o = 285 \mu\text{F}, L_o = 10 \mu\text{H}$$

Camera:

$$U_i = 4.4 \text{ V}, I_i = 3,3 \text{ A}, C_i = 185 \mu\text{F}, L_i = 0$$

Ambient temperature: $-10^\circ\text{C} \leq T_a \leq +40^\circ\text{C}$.

Degree of protection: IP68

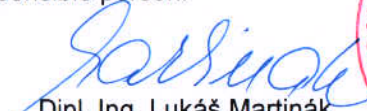
(16) Report No.: 12/0067

(17) Special conditions for safe use: none

(18) Essential Health and Safety Requirements:

Essential health and safety requirement of Directive 94/9/EC are covered by the standard mentioned in (9), according which the product was verified and in the manufacturer's instruction for use.

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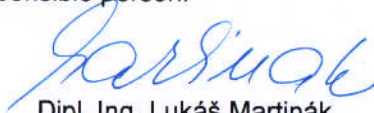
Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 12 ATEX 0067**

(19) List of Documentation:

<i>Document/Drawings:</i>	<i>Rev./Ver.:</i>	<i>Date:</i>	<i>Nr. of Pages:</i>
DTE201500491/A		27.02.2015	11
NKO201500378/A		17.02.2015	9
EX 02510-01-001,BS SCH	A	17.01.2013	1
EX 02510-02-300	A	20.02.2015	1
EX 02510-02-001	B	13.02.2013	1
EX 02510-02-002	B	13.02.2013	1
EX 02510-50-001	A	23.02.2015	1
List of components EX 02510-02-001/B		26.02.2015	1
List of components EX 02510-02-002/B		17.02.2015	1
EX 02510-01-001	C	28.06.2012	1
EX 02510-01-100	B	04.04.2012	1
List of components EX 02510-01-001/C		17.02.2015	1
1102383		23.11.2011	1
ExESDS 02510-50-001 SCH	B	08.12.2014	1
ExESDS 02510-50-001 HK	B	08.12.2014	1
ExESDS 02510-50-001 DK	B	08.12.2014	1
ExESDS 02510-50-001 HP	B	08.12.2014	1
ExESDS 02510-50-001 HO	B	08.12.2014	1
List of components ESPO1.TPD		10.03.2015	1
ExESDS 02510-51-001 SCH	A	07.05.2012	1
ExESDS 02510-51-001 HK	A	07.05.2012	1
ExESDS 02510-51-001 DK	A	07.05.2012	1
ExESDS 02510-51-001 HP	A	07.05.2012	1
ExESDS 02510-51-001 HO	A	07.05.2012	1
List of components ESPO1.PWS		11.03.2015	1
ExESDS 02510-52-001 SCH	A	07.05.2012	1
ExESDS 02510-52-001 HK	A	07.05.2012	1
ExESDS 02510-52-001 DK	A	07.05.2012	1
ExESDS 02510-52-001 HP	A	07.05.2012	1

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ExESDS 02510-52-001 HO	A	07.05.2012	1
List of components ESPO1.TPR		11.03.2015	1
ExESDS 02510-53-001 SCH	C	17.02.2015	1
ExESDS 02510-53-001 HK	C	17.02.2015	1
ExESDS 02510-53-001 DK	C	17.02.2015	1
ExESDS 02510-53-001 HP	C	17.02.2015	1
ExESDS 02510-53-001 HO	C	17.02.2015	1
List of components ESPO1.LED		10.03.2015	1
ExESDS 02510-54-001 SCH	A	17.02.2015	1
ExESDS 02510-54-001 HK	A	17.02.2015	1
ExESDS 02510-54-001 DK	A	17.02.2015	1
ExESDS 02510-54-001 DP	A	17.02.2015	1
ExESDS 02510-54-001 HO	A	17.02.2015	1
ExESDS 02510-54-001 HP	A	17.02.2015	1
List of components ESPO1.PSU		17.02.2015	1
02510-04-001, BS SCH	A	01.04.2015	1

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