

Explosion Proof Camera

Armadex Ex-M OZC 3

ATEX Zone 2 Certified



Key Benefits

- Suitable for ATEX Zone 2
- Connects with your smartphone
- Special hazardous area modes
- Ingress Protection: IP68
- Extremely Rugged and Lightweight
- Available in Red and Black

 II 3G Ex ic IIC T6 Gc



ATEX Certified Camera

The ARMADEX Ex-M OZC 3 is a robust digital camera built for use in hazardous areas on FPSO's, LNG Tankers, gas facilities, and chemical plants. It's certified for ATEX Zone 2 (Gas) ensuring it meets the strict safety standards required in explosive environments.

The camera can handle drops from 2.1 meters, submersion in water (IP68) without damage. In addition to that, the camera is crushproof up to 220lbf (100kgf), freeze-proof to -10°C, and features a time-lapse function for comprehensive monitoring. At only 249 grams, including its battery and optional SD Card, the OZC 3 is lightweight yet tough. The ATEX camera can take around 340 pictures on a full charge.

Its Wide Angle Optical Zoom Lens ensures clear and stable images at every zoom level, even up to a proximity of just 1 centimeter from an object, making it perfect for capturing detailed shots of small or intricate items like microchips. Moreover, it boasts an expanded 4x zoom function, offering even greater detail.

The OZC 3 performs exceptionally well in low light, thanks to its advanced imaging software and LED flash. New features like GPS for pinpointing location, sensors for checking temperature and elevation, and an anti-fog lens ensure the camera operates well in all conditions.

Explosion Safety Specifications (ATEX)

ATEX Zone	2 (Gas)
EU Directive	2014/34/EU (ATEX114)
ATEX marking gas	II 3G Ex h ic IIC T6 Gc
Applied standards	EN 60079-0:2012 +A11:2013
	EN 60079-11:2012
	EN ISO 80079-36:2016

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Full ATEX Camera Specifications

These are the specifications of the OEM OM System Tough TG-7 camera. Please note that the ARMADEX Ex-M OZC 3 comes without the Xenon Flash, however the built-in LED light is fully operational.

Feature	Description
Image Sensor	12 MP - 1/2.3" BSI CMOS
Processor	TruePic VIII
LENSES	25-100mm (35mm equiv.) - 4x Optical Zoom F2.0 (W) - F4.9 (T)
Macro Capability	Super macro: less than f=5.4mm, from 0.1m to 0.3m / above 5.4mm, from 0.01m to 0.3m / Microscope: 0.01m - 0.30m
One Push Tele-converter	x2 (P, A, Movie mode), x2/x4 (Microscope mode)
Image Stabilization	Sensor Shift Image Stabilization
Monitor	3.0", approx. 1,037k dots (3:2)
ISO	100 - 12,800
Shutter Speed	1/2 - 1/2000 sec. (A mode: up to 4 sec.)
Still Photo Recording	JPEG, RAW(12-bit lossless compression), JPEG+RAW [RAW] 4000 x 3000 [JPEG] 4000 x 3000 ~ 1280 x 960
Sequential Shooting	[Sequential shooting H]*: approx. 20 fps with selectable 10/20 fps [Sequential shooting L]: approx. 5 fps [Pro Capture]*: approx. 10 fps *Electronic Shutter
Interval Shooting	*Creating Time-lapse movie is possible with interval shooting up to 299 frames *Time priority, Frame priority selectable *Exposure smoothing is available
Video	3840×2160 (4K) 30p, 25p / IPB (approx. 102Mbps) 1920 x 1080 (FHD) / 60p, 50p, 30p, 25p / IPB (approx. 52Mbps, approx. 30Mbps, approx. 18Mbps) 1280 x 720 (HD) / 30p, 25p / IPB (approx. 26Mbps, approx. 14Mbps, approx. 10Mbps) *Frame rates may drop when particular Art Filters and Movie Effects are used.

Tough Capabilities	Waterproof to depths of 50 ft / 15 m - IPX8 Dustproof - IP6X Freezeproof to 14°F / -10°C Crushproof to 220 lbf / 100 kgf Shockproof from 7 ft / 2.1 m Anti-fog dual pane lens cover glass
GPS / Field Sensor System	GPS (GLONASS, Galileo, QZSS), compass, manometer, temperature sensor, acceleration sensor
Creative Features	Live Composite, Art Filters, HDR, Underwater Modes, Macro Modes, Construction Mode
Connectivity	USB Type-C Micro HDMI (type D) Built-in Wi-Fi (IEEE 802.11b/g/n) Built-in Bluetooth (Version 4.2 Bluetooth Low Energy)
Power	LI-92B Li-ion battery
Dimensions	113.9 mm (W) x 65.8 mm (H) x 32.7 mm (D) 4.48 in (W) x 2.59 in (H) x 1.28 in (D)
Weight	Approx. 249 g (with battery and memory card, based on CIPA standards) (0.55 lb / 8.78 oz)

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Compatibility table for SD Memory Cards

Please note: SD Memory Card is mandatory to operate the camera.



Company / Series name	Capacity
SanDisk Extreme Pro SDXC UHS-I Card	256GB, 512GB, 1TB
SanDisk Extreme Pro SDHC/SDXC UHS-II Card (*1)	32GB, 64GB, 128GB, 256GB
SanDisk Extreme PLUS SDHC/SDXC UHS-I Card	32GB, 64GB, 128GB, 256GB
KIOXIA EXCERIA PRO SDXC UHS-II Memory Card (*1)	64GB, 128GB, 256GB
KIOXIA EXCERIA PLUS SDHC/SDXC UHS-I Memory Card	32GB, 64GB, 128GB, 256GB, 512GB, 1TB

(*1)

The card slot supports UHS-I mode.

The camera will still operate at UHS-I speeds when a UHS-II card is inserted.

From 6 August 2024, a SanDisk SDXC Extreme Pro 128GB 200mb/s, is included when purchasing an Armadex Ex-M OZC 3 camera.

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Optimized Features for Hazardous Area Operations

The OZC 3 is equipped with features and modes tailored for hazardous environments:

- Data and Timestamp: Simplifies record-keeping with easy logging.
- Construction Mode (Hazardous Area Mode):
 - Removing dust particles from images.
 - Automatically adjusting brightness in dark areas for clarity.
 - Adapting to outdoor lighting, such as minimizing shadows in direct sunlight.
- Slow Shutter: Allows long exposure times to capture detailed images in low-light settings.
- Document Mode (Label Capture): Ensures legible captures of labels, facilitating digital reporting and analysis.
- Macro Mode: Provides extreme close-up detail from just 1 cm away, ideal for examining cracks and damage.
- Environmental Logging: Records location, ambient temperature, and pressure readings with a manometer.
- OI.Share: Enables seamless connection to a hazardous area smartphone for immediate image viewing and transfer.



Construction Mode Off



Construction Mode On



Construction Mode Off



Construction Mode On



Slow Shutter Mode Off



Slow Shutter Mode On



Document Mode



Macro mode



Panorama mode

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EU Declaration of Conformity

No. AM-X24ATEX2450X

In accordance with EN ISO/IEC 17050-1:2010

1. *Product model / product:*

Product: Explosion Proof Camera with Optical Zoom
Model/type: Armadex EX-M OZC 3

2. *Manufacturer:*

Name: Armadex Explosion Protection B.V.
Address: Tinststraat 33, 2984 AN, Ridderkerk, The Netherlands
Telephone / Web: +31 180 472880 / www.armadex.com

3. *This declaration of conformity is issued under the sole responsibility of the manufacturer.*

4. *Object of the declaration:*

Product: Explosion Proof Camera with 4 x Optical Zoom
Specification: Battery Supply: Rechargeable battery 3.6VDC, rated current max. 300 mA
ATEX Marking:  II 3G Ex h ic IIC T6 Gc

5. *The object of the declaration described above is in conformity with the relevant EU harmonization legislation:*

ATEX DIRECTIVE 2014/34/EU "Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres"

6. *References to the relevant harmonized standards used or references to the other technical specifications in relation to which conformity is declared:*

Reference & Date	Title
EN 60079-0: 2018	Explosive atmospheres – Part 0: Equipment – General requirements
EN 60079-11: 2012	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
EN ISO 80079-36: 2016	Explosive atmospheres – Part 36: Non-electrical equipment for explosive atmospheres - Basic method and requirements
EN ISO 80079-37: 2016	Explosive atmospheres – Part 37: Non-electrical equipment for explosive atmospheres – Non-electrical type of protection constructional safety "c", control of ignition sources "b", liquid immersion "k"

7. *Additional information:*

(X) Specific conditions of use are specified in the accompanying user manual of the equipment

THIS DECLARATION IS NOT A WARRANTY OF ATTRIBUTES WITHIN THE MEANING OF THE LAW CONCERNING PRODUCT LIABILITY. THE SAFETY INSTRUCTIONS GIVEN IN THE INSTALLATION MANUAL MUST BE OBSERVED. THE APPARATUS SHALL ONLY BE OPERATED UNDER THE CONDITIONS AS DESCRIBED IN THE USER MANUAL

Signed for and on behalf of: Armadex Explosion Protection B.V.

Place of issue: Ridderkerk, The Netherlands

Date of issue: 11-03-2024

Name: G. A. van Tienhoven, MSc. of Engineering

Function: Director

Signature:



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Declaration of Conformity

In accordance with BS EN ISO/IEC 17050-1:2010

1. *Product model / product:*

Product Explosion Proof Camera with Optical Zoom
Model/type Armadex Ex-M OZC 3

2. *Manufacturer:*

Name Armadex Explosion Protection Ltd.
Address 7 Albert Street, Aberdeen AB25 1XX, Scotland, UK.
Telephone / Web +44 1224 679258 / www.armadex.com

3. *This declaration is issued under the sole responsibility of the manufacturer.*

4. *Object of the declaration:*

Product Explosion Proof Camera with 4 x Optical Zoom
Specification Battery Supply: Rechargeable battery 3.6VDC, rated current max. 300 mA
UKEX Marking  II 3G Ex h ic IIC T6 Gc

5. *The object of the declaration described above is in conformity with the relevant UK Statutory Instruments:*

2016 No. 1107 Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations

6. *References to the relevant designated standards used or references to the other technical specifications in relation to which conformity is declared:*

Reference & Date	Title
EN IEC 60079-0: 2018	Explosive atmospheres – Part 0: Equipment – General requirements
EN 60079-11: 2012	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
EN ISO 80079-36: 2016	Explosive atmospheres – Part 36: Non-electrical equipment for explosive atmospheres - Basic method and requirements
EN ISO 80079-37: 2016	Explosive atmospheres – Part 37: Non-electrical equipment for explosive atmospheres – Non-electrical type of protection constructional safety "c", control of ignition sources "b", liquid immersion "k"

7. *Additional information:*

Outdoor unit is suitable for hazardous area.
Indoor unit and remote control are for non-hazardous (safe area) use only

Signed for and on behalf of: Armadex Explosion Protection Ltd.

Place of issue: Aberdeen, UK

Date of issue: 11-03-2024

Name:  G. A. van Tienhoven, MSc. of Engineering

Function: Director, IECEx Certified Person

Signature:



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