Zebra AltiZ Regulatory Guide



Regulatory Information

This device is approved under Zebra Technologies Corporation. This guide applies to the following model numbers:

AZ1

All Zebra devices are designed to be compliant with the rules and regulations in the locations they are sold and will be labeled as required.

Local language translation / (BG) Превод на местен език / (CZ) Překlad do místního jazyka / (DE) Übersetzung in die Landessprache / (EL) Μετάφραση τοπικής γλώσσας / (ES) Traducción de idiomas locales / (ET) Kohaliku keele tõlge / (FI) Paikallinen käännös / (FR) Traduction en langue locale / (HR) Prijevod na lokalni jezik / (HU) Helyi nyelvű fordítás / (IT) Traduzione in lingua locale / (JA) 現地語翻訳 / (LT) Vietinės kalbos vertimas / (LV) Tulkojums vietējā valodā / (NL) Vertaling in lokale taal / (PL) Tłumaczenie na język lokalny / (PT) Tradução do idioma local / (RO) Traducere în limba locală / (SK) Preklad do miestneho jazyka / (SL) Prevajanje v lokalni jezik / (SR) Превод на локални језик / (SV) Översättning av lokalt språk / (TR) Yerel dil çevirisi / (ZH-CN) 当地语言翻译 / (ZH-TW) 當地語言翻譯 / zebra.com/mv-support

Any changes or modifications to Zebra equipment not expressly approved by Zebra could void the user's authority to operate the equipment.

Declared maximum operating temperature: 45°C



CAUTION: This is a Class A product. This equipment is not intended for use in residential environments and may not provide adequate protection to radio reception in such environments.

Regulatory Markings

Regulatory markings subject to certification are applied to the device. Refer to the Declaration of Conformity (DoC) for details of other country markings. The DOC is available at: zebra.com/doc.

Key to symbols, laser warnings, handling, and cleaning instructions

You should be aware of the meaning of the symbols on Zebra AltiZ and important usage and handling precautions.

Zebra AltiZ safety precautions and key to symbols

Before installing, connecting to, and using Zebra AltiZ, you shall be aware of the meaning of the symbols on the 3D sensor and important safety measures. The following is a list of precautionary symbols on the 3D sensor and their meaning:

Symbol^a Description Caution: Consult this product's installation and hardware reference manual^b before installing, connecting to, and using Zebra AltiZ. For hardware connection instructions, refer to Chapter 2: Powering and connecting to your Zebra AltiZ; for environmental and electrical specifications and connector pinout descriptions, refer to Appendix B Technical reference. This product must be used as specified; otherwise, the protection provided by its components might be compromised. Any usage, changes, or modifications to Zebra equipment not expressly approved by Zebra could compromise product safety and void the user's authority to operate the equipment. Refer to the *Electrical specifications* section, in *Appendix B: Technical reference* of the above-mentioned manuals, for voltages and current ratings. • There are no serviceable parts on this product. In case of defect, contact your Zebra representative. To maintain IP67 conformity, all unused connectors on your Zebra AltiZ must be protected by connector caps. This product meets the requirements of a Category I installation as per industry standards^c. This product is designed for use in a pollution degree 2 environment as per industry standards^c. This product is designed for indoor use only. This product is designed to operate at temperatures ranging from 0°C to 45°C at a non-condensing relative humidity of 10 to 90%. If the ambient temperature reaches over 45°C, the laser will shut off. This product is not intended for use at altitudes exceeding 2000 m. DC current only. Zebra AltiZ can be powered using a 24 V DC power supply (+/-10% tolerance, 0.5 A) or an IEEE 802.3af compliant PSE device (44-57 VDC, 12 W). Earth ground. To ensure EMC conformity, connect the chassis ground hole of your Zebra AltiZ to earth ground.

- a. Note that these symbols might not necessarily be the same color as depicted.
- b. Manual available on the Zebra website at zebra.com/mv-manuals.
- c. As per CAN/CSA-C22.2 No 61010-1-12, UL std. No 61010-1 (3rd edition), and EN Std. No. 61010-1 (3rd Edition).

Ergonomic Recommendations

In order to avoid or minimize the potential risk of ergonomic injury, always follow good ergonomic workplace practices. Consult with your local Health and Safety Manager to ensure that you are adhering to your company's safety programs to prevent employee injury.

Optical Devices



Laser

Laser safety

Zebra AltiZ incorporates a laser that is shaped into a line pattern, and has the potential to cause eye injury if it is mishandled. As such, the safety precautions outlined in this section are to be followed.

The laser used in Zebra AltiZ is either Class 2M or 3R, depending on the model. Power to the laser is indicated visually by an LED on the 3D sensor. Zebra AltiZ is available in up to 4 different models; these models and their laser characteristics are outlined in the table below:

		Zebra AltiZ model					
		AZ1D4SR	AZ1D4SB	AZ1D4MR	AZ1D4LR		
Laser class		2M	2M	3R	3R		
Beam divergence							
	Full angle along line length	45° (0.79 rad)	45° (0.79 rad)	38° (0.66 rad)	60° (1.05 rad)		
	Full angle along line width	6.4 mrad	4.4 mrad	3.7 mrad	3.1 mrad		
Wavelength		645 nm - 665 nm	400 nm - 410 nm	645 nm - 665 nm	645 nm - 665 nm		
Pulse duration		50 μsec - 1 sec	50 µsec - 1 sec	50 μsec - 1 sec	50 µsec - 1 sec		
Frequency range		1-3800 Hz	1-3800 Hz	1-3800 Hz	1-3800 Hz		

The housing of Zebra AltiZ must only be opened by authorized persons. For repair and service, Zebra AltiZ should always be returned to Zebra.

Caution

Use of controls, adjustments, or performance of procedures other than those specified herein might result in hazardous radiation exposure.

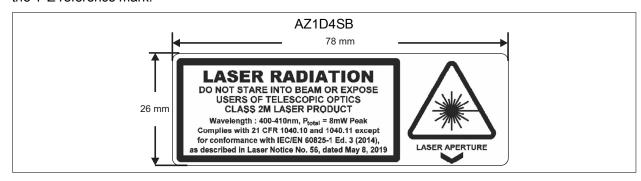
When operating Zebra AltiZ, the relevant regulations according to EN60825-1 (IEC 60825, Part 1 of 05/2008), FDA 86-8260 and all applicable accident prevention must be followed.

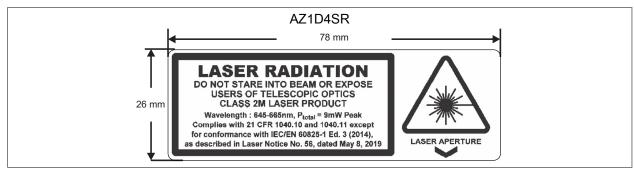
Laser Class 2M

Certain models of the Zebra AltiZ 3D sensor have a field of view (FoV) ranging from 55 mm to 75 mm and are classified as Laser Class 2M. Class 2M lasers emit a visible radiation in the wavelength range of 400 nm to 700 nm and are considered safe for momentary exposure, assuming normal eye-closure reflex, but can be hazardous if deliberately stared into. Accordingly, the following applies:

- A direct glimpse into the beam can be dangerous if eye-closure reflex is deliberately suppressed. A
 user should not stare directly into the beam and should close their eyes immediately when the eyes are
 directly exposed to the laser.
- Avoid direct eye exposure to the reflection of the laser beam when it is reflected off a mirrored surface.
- Dazzle, flash-blindness, and after images might be caused by a beam from a Class 2M laser product, particularly under low ambient light conditions.
- Direct viewing into the beam with telescopic optical aids (for example, binoculars or telescopes) might pose an eye hazard; therefore, the laser should not be directed into an area where such instruments are likely to be used.
- Class 2M laser equipment can be used without additional protective measures. If you are working in an
 environment where the potential for direct exposure to laser radiation is likely, we recommend using
 eye protection with an optical density of 2.0 or higher.

The following information labels are attached to the Zebra AltiZ housing and are found on the same side as the Y-Z reference mark:



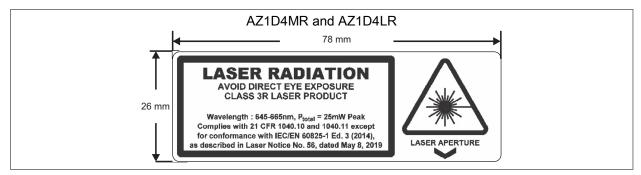


Laser Class 3R

Certain models of Zebra AltiZ 3D sensor have an FoV ranging from 85 mm to 310 mm and are classified as Laser Class 3R. Class 3R lasers emit radiation that can exceed maximum permissible exposure (MPE) under direct intrabeam viewing. Though the risk of injury is relatively low, direct intrabeam viewing is restricted. Accordingly, the following applies:

- Avoid direct eye exposure. Do not directly look into the laser beam, or direct it in areas where people
 are likely to directly view the beam.
- · Avoid direct eye exposure to the reflection of the laser beam when it is reflected off a mirrored surface.
- Dazzle, flash-blindness, and after images might be caused by a beam from a Class 3R laser product, particularly under low ambient light conditions.
- Direct viewing into the beam with telescopic optical aids (for example, binoculars or telescopes) poses an eye hazard, and thus the laser should not be directed into an area where such instruments are likely to be used.
- Class 3R laser equipment can be used without additional protective measures as long as direct
 viewing, or viewing the beam through a mirror, is restricted. If you are working in an environment where
 the potential for direct exposure to laser radiation is likely, we recommend using eye protection with an
 optical density of 2.0 or higher.

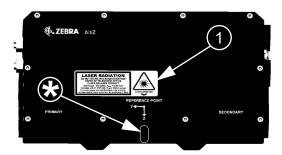
The following information label is fitted to the Zebra AltiZ housing and are found on the same side as the Y-Z reference mark.





CAUTION: Use of controls, adjustments, or the performance of procedures other than those specified in the supplied product documentation may result in hazardous laser light exposure.

Scanner Labeling



Labels read:

1. Complies with 21 CFR1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 56, dated May 08, 2019 and IEC/EN 60825-1:2014.

CAUTION: Laser light emitted from this aperture.

Power Supply

This device may be powered by either an external power supply or Power over Ethernet (PoE) 802.3af power source. Ensure the applicable instructions are followed.



WARNING ELECTRICAL SHOCK: Use only a Zebra approved, Certified ITE [SELV] power supply with appropriate electrical ratings. Use of alternative power supply will invalidate any approvals given to this unit and may be dangerous.

This device must be powered from a 802.3af compliant power source which meets local compliance requirements.

Connecting to a LAN Network

Please note that this device is not tested or authorized to be connected via Ethernet cable to a Local Area Network (LAN) in outdoors conditions. It may only be connected to an indoor LAN.

(€ Marking and European Economic Area (EEA)

Statement of Compliance

Zebra hereby declares that this device is in compliance with Directives 2014/30/EU, 2014/35/EU and 2011/65/EU.

The full text of the EU Declaration of Conformity is available at: <u>zebra.com/doc</u>.

EU Importer: Zebra Technologies B.V

Address: Mercurius 12, 8448 GX Heerenveen, Netherlands

Waste Electrical and Electronic Equipment (WEEE)

For EU and UK Customers: For products at the end of their life, please refer to recycling/disposal advice at: zebra.com/weee.

United States and Canada Regulatory

Radio Frequency Interference Notices

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Radio Frequency Interference Requirements - Canada

Innovation, Science and Economic Development Canada ICES-003 Compliance Label: CAN ICES-003 (A)/NMB-003(A)

Brasil

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.

中国 (China)

通过访问以下网址可下载当地语言支持的产品说明书 zebra.com/mv-support.



警告 Warning

此为 A 级产品,在生活环境中,该产品可能会造成无线电干扰。在这种情况下,可能需要用户对干扰采取 切实可行的措施。

如果配套使用外部电源适配器,请确保其已通过 CCC 认证



产品中有害物质的名称及含量

	有害物质						
部件名称	铅	汞	镉	六价铬	多溴联 苯	多溴二 苯醚	
金属部件	X	0	0	0	0	0	
电路模块	Х	0	0	0	0	0	
电缆及电缆组件	0	0	0	0	0	0	
塑料和聚合物部件	0	0	0	0	0	0	
光学和光学组件	Х	0	0	0	0	0	

本表格依据 SJ/T 11364 的规定编制。

- O: 表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。
- X:表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 规定的限量要求。(企业可在此处,根据实际情况对上表中打 "×" 的技术原因进行进一步说明。

한국 (South Korea)

이 기기는 업무용 환경에서 사용할 목적으로 적합성평가를 받은 기기로서 가정용 환경에서 사용하는 경우 전파간섭의 우려가 있습니다.

臺灣 (Taiwan)

限用物質含有情況標示聲明書

設備名	型號 (型式) AZ1						
單元	限用物質及其化學符號						
	鉛	汞	鎘	六價鉻	多溴聯 苯	多溴二苯 醚	
印刷電路板及電子組件	-	0	0	0	0	0	
金屬零件	-	0	0	0	0	0	
電纜及電纜組件	0	0	0	0	0	0	
塑料和聚合物零件	0	0	0	0	0	0	
光學與光學元件 —	-	0	0	0	0	0	

備考 1. 〝超出 0.1 wt % ″ 及 〝超出 0.01 wt % ″ 係指限用物質之百分比含量超出百分比含量基準值。

備考 2. NO / 係指該項限用物質之百分比含量未超出百分比含量基準值。

備考 3. "-" 係指該項限用物質為排除項目。

Türkiye (Turkey)

TÜRK WEEE Uyumluluk Beyanı

EEE Yönetmeliğine Uygundur.



UK United Kingdom

CA Statement of Compliance

Zebra hereby declares that this device is in compliance with Electromagnetic Compatibility Regulations 2016, the Electrical Equipment (Safety) Regulations 2016 and the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012.

The full text of the UK Declaration of Conformity is available at: <u>zebra.com/doc</u>.

UK Importer: Zebra Technologies Europe Limited

Address:

Dukes Meadow, Millboard Rd, Bourne End, Buckinghamshire, SL8 5XF

Warranty

For the complete Zebra hardware product warranty statement, go to: <u>zebra.com/mv-support</u>.

Service Information

Before you use the unit, it must be configured to operate in your facility's network and run your applications.

If you have a problem running your unit or using your equipment, contact your facility's Technical or System Support. If there is a problem with the equipment, they will contact Zebra support at zebra.com/mv-support.

For the latest version of the guide, go to: <u>zebra.com/mv-manuals</u>.

Patent Information

This product may be protected by one or more patents.

Patents: zebra.com/patents.