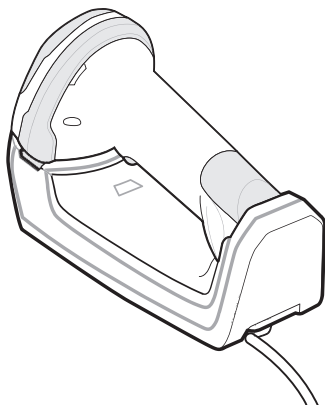


CR8178-SC

Standard Cradle



Quick Reference Guide



ZEBRA

Introduction

The CR8178-SC (standard) cordless digital scanner cradle acts as charger and radio communication interface for the DS8178 and DS4678 cordless digital scanner. The CR8178-SC can sit on a desktop or be mounted on a wall. The CR8178-SC healthcare cradle can sit on a desktop or be mounted on a wall or cart.

The cradle receives data from the digital scanner via a Bluetooth radio, and sends that data to the host through an attached cable. The cradle also charges the digital scanner's internal battery when the digital scanner is inserted. The digital scanner can be charged from an external power supply or a USB cable powered by the host.

This document provides basic instructions on setting up and using the cradle.

Equipment Supplied

The cradle package includes one CR8178-SC cradle.

Accessories

The following equipment may be needed:

- Power supply (for faster charging).
- Mounting
 - Two M4 screws (for a vertical mount using the threaded brass screw holes, if applicable). Not available from Zebra.
 - Wall mount bracket. Not available from Zebra.
 - 3M™ Dual Lock™ fasteners for mounting. Sold separately from Zebra.

Save the shipping container for storing or shipping. Inspect all equipment for damage. If anything is damaged or missing, call an authorized Zebra Support Center immediately.

Related Documentation

- *DS8178 Quick Start Guide*, p/n MN-002753-xx.
- *DS8178 Product Reference Guide*, p/n MN-002752-xx.
- *DS4678 Quick Start Guide*, p/n MN-004891-xx.
- *DS4678 Product Reference Guide*, p/n MN-004890-xx.
- *CR8178-PC Presentation Cradle Quick Reference Guide*, p/n MN-002854-xx.
- *CR8178-PC Document Capture Stand*, p/n MN-002858-xx.

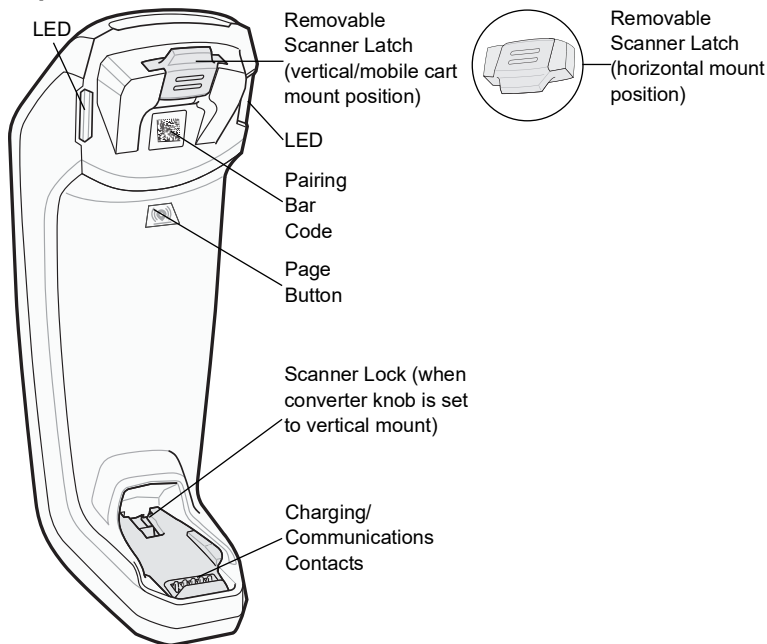
All documentation and translations are available at: zebra.com/support.

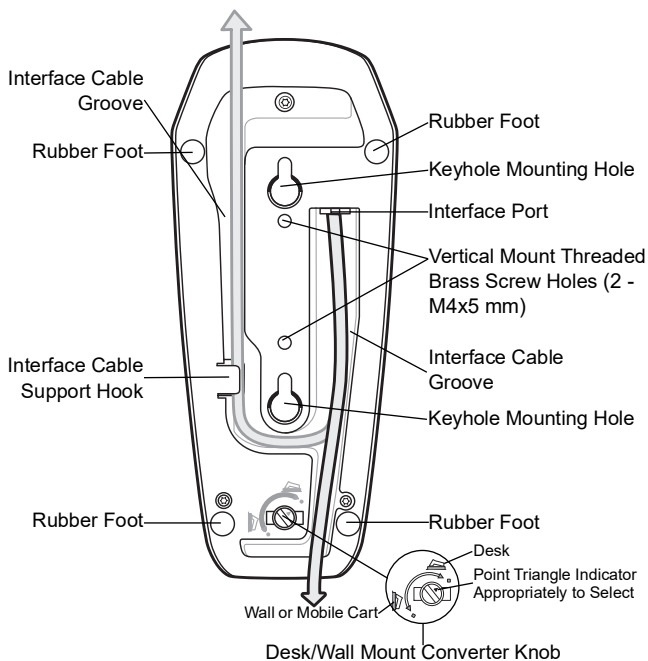
Service Information

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

For the latest version of this guide go to: zebra.com/support.

Cradle Features Top



Bottom

✓ **NOTE** When mounting on a mobile cart the desk/wall mount converter knob must be in the wall mount position (locked).

Connecting the Cradles

1. Connect the appropriate cable to the power supply and an AC power source, if necessary. This ensures detection of the host and prevent inadvertently back powering the cradle from improper detection of the host.
2. Insert the interface cable into the host port.
3. Insert the interface cable into the cradle's host port.
4. If applicable, thread the interface cable under the interface cable support hook and run the cable along the interface cable groove.
5. Pair the digital scanner to the cradle either by inserting it in the cradle (if Pair on Contacts is enabled) or by scanning the pairing bar code.
6. If necessary, scan the appropriate host bar code (for non-autodetected interfaces). Refer to the scanner's *Product Reference Guide*.

Changing the Host Interface

To connect to a different host, or to the same host through a different cable:

1. Unplug the interface cable from the host.
2. Unplug the power supply from the cradle, if a power supply is used.
3. Connect the interface cable to the new host, or the new interface cable to the existing host.
4. Reconnect the power supply, if required.
5. If necessary, scan the appropriate host bar code (for non-autodetected interfaces). Refer to the scanner's *Product Reference Guide*.

Using a DC Power Supply

The cradle can operate from host supplied power, if available. If host power is limited or not available, an external DC power supply can be used with certain host interface cables that support a power jack. An external power supply is recommended if fastest charging is required.



CAUTION Always disconnect the DC power supply BEFORE disconnecting the cable to the host end or the cradle may not recognize the new host.

Mounting the Cradle

Horizontal Mount

1. Ensure the scanner latch is in the horizontal mount position (see [Removable Scanner Latch \(horizontal mount position\) on page 3](#)).
2. Use a screwdriver or coin to turn the desk/wall mount converter knob (triangle indicator) to the position shown below.

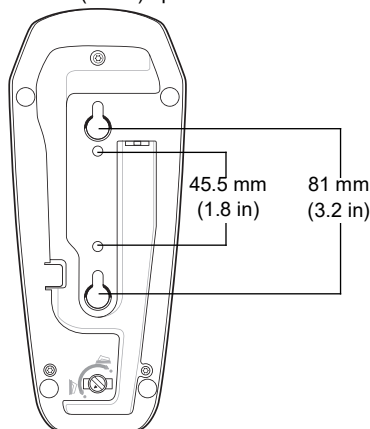


3. The rubber feet on the bottom of the cradle provide traction and prevent surface damage.

Vertical Mount/Mobile Cart

Mount the cradle vertically as follows:

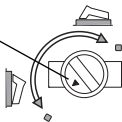
1. Ensure the scanner latch is in the vertical mount position (see [Removable Scanner Latch \(vertical/mobile cart mount position\) on page 3](#)).
2. Mount using the two brass threaded screw holes or the two keyhole mounts.
 - a. When mounting using the two brass threaded screw holes, drill the holes 45.5 mm (1.8 in) apart and use two M4 screws.
 - b. When mounting using the two keyhole mounts, install the screws on the wall 81 mm (3.2 in) apart.



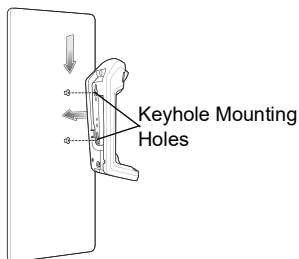
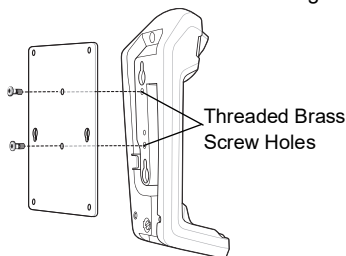
Note: Drawing is not to scale.

3. Use a screwdriver or coin to turn the desk/wall mount converter knob (triangle indicator) to the position shown below. The scanner locking mechanism in the cradle protracts to engage and grip the depression at the base of the digital scanners handle.

Wall or Mobile
Cart Position



4. Attach the interface and power cables (see [Connecting the Cradles on page 5](#)).
5. Press the cables into the cable grooves.
6. Attach the cradle securely to the surface using the vertical mount threaded brass screw holes or mounting holes.

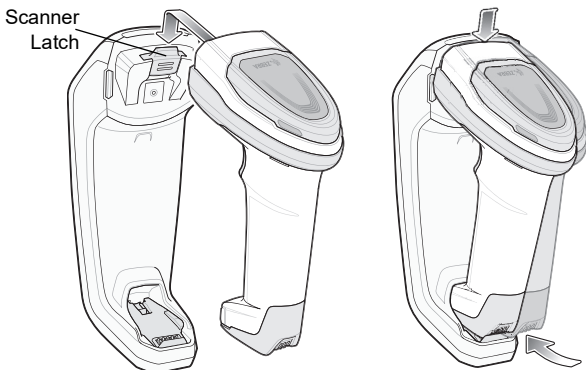


7. Insert the digital scanner in the cradle.

Inserting the Digital Scanner in the Cradle

To insert the digital scanner in the cradle:

1. Insert the scanner into the cradle top first ensuring that the cradle latch depression connects with the scanner latch on the cradle.
2. Push the handle until it clicks into place, engaging the contacts in the cradle and digital scanner.



Sending Data to the Host Computer

The cradle receives data from the digital scanner via a wireless radio connection and transmits it to the host computer via the host cable. The digital scanner and cradle must be paired for successful wireless communication.

Pairing



NOTE The pairing bar code that connects the digital scanner to a cradle is unique to each cradle. Do not scan data or parameters until pairing completes.

Pairing registers a digital scanner to the cradle such that the digital scanner and cradle can exchange information. The cradle operates in two modes: Point-to-Point and Multipoint-to-Point. In Point-to-Point mode, pair the digital scanner to the cradle either by inserting it in the cradle (if pair on contacts is enabled), or by scanning the pairing bar code. In Multipoint-to-Point mode, you can pair up to seven digital scanners to one cradle.

To pair the digital scanner with the cradle, scan a pairing bar code. A high-low-high-low beep sequence followed by a low-high beep sequence indicates successful pairing and connection to the remote device. A long low, long high beep sequence indicates unsuccessful pairing.

Lost Connection to Host

If scanned data does not transmit to the cradle's host, ensure that all cables are firmly inserted and the power supply is connected to an appropriate AC outlet, if applicable. If scanned data still does not transmit to the host, reestablish a connection with the host:

1. Disconnect the host interface cable from the cradle.
2. Wait three seconds.
3. Reconnect the host interface cable to the cradle.
4. Reestablish pairing with the cradle by scanning the pairing bar code.

Charging the Digital Scanner Battery

When using a new battery in the digital scanner, the battery requires a charge to be enabled. Insert the battery in the digital scanner and place the digital scanner in the cradle (see [Inserting the Digital Scanner in the Cradle on page 8](#)). The battery begins charging when the cradle LED indicator starts flashing amber. The battery is fully charged when the cradle LED is solid green. A complete charge of a fully discharged battery can take up to three hours using external power and up to ten hours using the USB interface cable.

Cradle LED Indicators

LED	Indication
Standard Use	
Green (stays on)	Power Up
Radio Indications	
Green (off, then on)	Bluetooth connection established
Blue	Page button
Blue (fast/fast/slow)	Page issued
Battery Indications	
Amber (stays on)	Pre-charging
Amber blinking	Charging
Green (stays on)	Fully charged
Amber fast blinking	Charging Error
Battery End of Life Indications (DS8178 only)	
Red blinking	Charging
Red (stays on)	Fully charged
Red fast blinking	Charging error

LED	Indication
Maintenance Indications	
Red (stays on)	Enter boot loader
Red blinking	Firmware installation

Troubleshooting

If the cradle does not work after following the previous procedures:

- Check the system power.
- Check for loose cable connections.
- Check that the digital scanner is inserted properly in the cradle.
- Check that the host settings are correct and the cradle is connected to the appropriate port on the host.
- If water spills on the contacts area, the unit might not function properly. Turn the power off and tilt the cradle to drain as much liquid as possible. Do not shake the cradle. Use a paper towel to dry the outside surfaces, and expose the unit to room conditions for up to 24 hours to allow liquid to dry around the contacts.

Health and Safety Recommendations

Ergonomic Recommendations



CAUTION

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

- Reduce or eliminate repetitive motion.
- Maintain a natural position.
- Reduce or eliminate excessive force.
- Keep objects that are used frequently within easy reach.
- Perform tasks at correct heights.
- Reduce or eliminate vibration.
- Reduce or eliminate direct pressure.
- Provide adjustable workstations.
- Provide adequate clearance.
- Provide a suitable working environment.
- Improve work procedures.

Regulatory Information

This device is approved under Zebra Technologies Corporation.

This guide applies to the following Model Number: CR8178-SC and CR8178A-SC.

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 translations are available at the following website:

zebra.com/doc.

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

Bluetooth® Wireless Technology

This is an approved Bluetooth® product. For more information on the Bluetooth SIG listing, please visit bluetooth.com

Power Supply

Use ONLY one of the following Zebra approved UL LISTED ITE (IEC/EN 60950-1, LPS) power supplies with one of the following electrical ratings:

- Output 12Vdc, min 4.16A
- Output 5.0Vdc, 1.2A
- Output 5.2Vdc, min 1.2A

Use of alternative power supplies will invalidate any approvals given to this unit and may be dangerous.

Wireless Device Country Approvals

Regulatory markings subject to certification are applied to the device signifying the radio(s) is/are approved for use in the following countries and continents:

United States, Canada, Japan, China, South Korea, Australia, Europe and United Kingdom.

Please refer to the Declaration of Conformity (DoC) for details of other country markings. This is available at: zebra.com/doc.

Note: Europe includes Austria, Belgium, Bulgaria, Croatia, Czech Republic, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden and Switzerland.



CAUTION

Operation of the device without regulatory approval is illegal.



Warnings for Use of Wireless Devices

Caution: Please observe all warning notices with regard to the usage of wireless devices.

Potentially Hazardous Atmospheres - Fixed Installations

You are reminded of the need to observe restrictions on the use of radio devices in fuel depots, chemical plants etc. and areas where the air contains chemicals or particles such as grain, dust, or metal powders.

Safety in Aircraft

Switch off your wireless device whenever you are instructed to do so by airport or airline staff. If your device offers a 'flight mode' or similar feature, consult airline staff as to its use in flight.

Safety in Hospitals



Pacemakers

Pacemaker manufacturers recommended that a minimum of 15cm (6 inches) be maintained between a handheld wireless device and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with independent research and recommendations by Wireless Technology Research.

Persons with Pacemakers:

- Should ALWAYS keep the device more than 15cm (6 inches) from their pacemaker when turned ON.
- Should not carry the device in a breast pocket.
- Should use the ear furthest from the pacemaker to minimise the potential for interference.
- If you have any reason to suspect that interference is taking place, turn OFF your device.

Other Medical Devices

Please consult your physician or the manufacturer of the medical device to determine if the operation of your wireless product may interfere with the medical device.

RF Exposure Guidelines



Safety Information

- Reducing RF Exposure - Use Properly

Only operate the device in accordance with the instructions supplied.

- International

The device complies with internationally recognized standards covering human exposure to electromagnetic fields. For information on international human exposure to electromagnetic fields refer to the Zebra Declaration of Conformity (DoC) at zebra.com/doc.

Use only Zebra tested and approved headset, belt-clips, holsters, and similar accessories to ensure RF exposure compliance. If applicable, follow the instructions for use as detailed in the accessory guide. The use of third-party belt clips, holsters, and similar accessories may not comply with RF exposure compliance requirements and should be avoided. For further information on the safety of RF energy from wireless devices, refer to RF exposure and assessment standards section at zebra.com/responsibility.

Europe

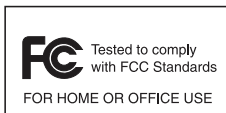
To satisfy EU RF exposure requirements, a transmitting device must operate with a minimum separation distance of 20 cm or more from a person's body.

US and Canada

To satisfy US and Canadian RF exposure requirements, a transmitting device must operate with a minimum separation distance of 20 cm or more from a person's body.

Pour satisfaire aux exigences Américaines et Canadiennes d'exposition aux radio fréquences, un dispositif de transmission doit fonctionner avec une distance de séparation minimale de 20 cm ou plus de corps d'une personne.

Radio Frequency Interference Requirements-FCC



Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This

equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However there is no guarantee that

interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment in an outlet on a circuit different from the receiver is connection.
- Consult the dealer or an experienced radio/TV technician for help.

Radio Transmitters (Part 15)

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.

Radio Frequency Interference Requirements-Canada

Innovation, Science and Economic Development Canada ICES-003

Compliance Label: CAN ICES-003 (B)/NMB-003(B).

This device complies with Innovation, Science and Economic Development Canada's license-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radio électrique subi même si le brouillage est susceptible d'en compromettre le fonctionnement.



CE Marking and European Economic Area (EEA)

Bluetooth® Wireless Technology for use through the EEA have the following restrictions:

Maximum radiated transmit power of 100mW EIRP in the frequency range 2.400 -2.4835 GHz.

Statement of Compliance

Zebra hereby declares that this radio equipment is in compliance with Directives 2014/53/EU and 2011/65/EU.

Any radio operation limitations within EEA countries are identified in Appendix A of EU Declaration of Conformity.

The full text of the EU Declaration of Conformity is available at the following Internet address: zebra.com/doc.

EU Importer: Zebra Technologies B.V

Address: Mercurius 12, 8448 GX Heerenveen, Netherlands

Japan (VCCI) - Voluntary Control Council for Interference

Class B ITE

この装置は、クラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。 VCCI-B

Korea Warning Statement for Class B ITE

기종별	사용자 안내문
B급 기기	이 기기는 가정용으로 전자파 적합등록을 한 기기이오니 주거지역에서는 물론 모든 지역에서 사용할 수 있습니다.

Brazil (UNWANTED EMISSIONS - ALL PRODUCTS)

Declarações Regulamentares para CR8178 - Brazil

Nota: A marca de certificação se aplica ao Transceptor, modelo CR8178. Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.

Para maiores informações sobre ANATEL consulte o site: anatel.gov.br.

Chile

Este equipo cumple con la Resolución No 403 de 2008, de la Subsecretaria de telecomunicaciones, relativa a radiaciones electromagnéticas.

Conforme a Resolución 755 parte j.1), se ajustará el dispositivo a operar en interiores en las siguientes bandas con una potencia máxima radiada no superior a 150mW:

2.400 hasta 2.483,5 MHz

5.150 hasta 5.250MHz

5.250 hasta 5.350MHz

5.725 hasta 5.850MHz

Además, de acuerdo con Resolución 755, para la banda 5150-5250MHz la operación del equipo estará restringida al interior de inmuebles y la densidad de

potencia radiada máxima no supera 7,5mW/MHz en cualquier banda de 1MHz y 0.1875mW/25kHz en cualquier banda de 25kHz.

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/support



Eurasian Customs Union



Евразийский Таможенный Союз

Данный продукт соответствует требованиям знака EAC.



United Kingdom

Statement of Compliance

Zebra hereby declares that this radio equipment is in compliance with the Radio Equipment Regulations 2017 and the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012.

Any radio operation limitations within UK are identified in Appendix A of UK Declaration of Conformity.

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

UK Importer: Zebra Technologies Europe Limited

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

Mexico

Restrict Frequency Range to: 2.450 - 2.4835 GHz.

La operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Taiwan

臺灣

低功率電波輻射性電機管理辦法

取得審驗證明之低功率射頻器材，非經核准，公司、商號或使用者均不得擅自

變更頻率、加大功率或變更原設計之特性及功能。

低功率射頻器材之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前述合法通信，指依電信管理法規定作業之無線電通信。低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

Türkiye

Turkish WEEE Statement of Compliance

EEE Yönetmeliğine Uygundur.



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

CMM Disclosure

部件名称 (Parts)	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
金属部件 (Metal Parts)	O	O	O	O	O	O
电路模块 (Circuit Modules)	X	O	O	O	O	O
电缆及电缆组件 (Cables and Cable Assemblies)	O	O	O	O	O	O
塑料和聚合物部件 (Plastic and Polymeric Parts)	O	O	O	O	O	O
光学和光学组件 (Optics and Optical Components)	O	O	O	O	O	O
电池 (Batteries)	O	O	O	O	O	O

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“X”的技术原因进行进一步说明。）
- This table was created to comply with China RoHS requirements.



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