

# FX9600

RFID Reader



**Quick Reference Guide**



**ZEBRA**

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## Warranty

For the complete Zebra hardware product warranty statement, go to:  
[www.zebra.com/warranty](http://www.zebra.com/warranty).

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## Service Information

If you have a problem using the equipment, contact your facility's Technical or Systems Support. If there is a problem with the equipment, they will contact the Zebra Support at: [www.zebra.com/support](http://www.zebra.com/support).

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## Software Support

Zebra wants to ensure that customers have the latest release of entitled software at the time of product purchase.

To confirm that your Zebra device shipped with the latest release of entitled software, go to: [www.zebra.com/support](http://www.zebra.com/support).

If your device does not have the latest entitled software release as of your product purchase date, please e-mail a request to Zebra at: [entitlementservices@zebra.com](mailto:entitlementservices@zebra.com).

You must include the following essential device information with your request:

- Model number
- Serial number
- Proof of purchase
- Title of the software download you are requesting.

If it is determined by Zebra that your device is entitled to the latest software release, you will receive an e-mail containing a link directing you to a Zebra web site to download the appropriate software.

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## Related Information

The following documents and software provide more information about the RFID reader:

- FX Series RFID Reader Integration Guide (p/n MN000026Axx)
- RFID Reader Software Interface Control Guide (p/n 72E-131718-xx)
- RFID Demo Applications User Guide (p/n 72E-160038-xx)
- FX Series Embedded SDK Installation Guide
- FX Series Embedded SDK Programmers Guide

- FX Series Embedded SDK Sample Application Guide

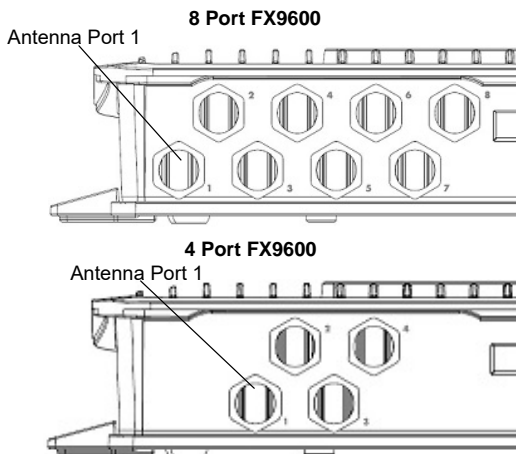
For the latest version of this guide and all guides, go to: [www.zebra.com/support](http://www.zebra.com/support).

## Introduction

The FX9600 reader provides real-time, seamless tag processing for EPC Class1 Gen2V2 compliant tags. This Quick Reference Guide provides information about installing and connecting the reader. For more information refer to the *FX Series RFID Reader Integration Guide* available at: [www.zebra.com/support](http://www.zebra.com/support).

## Reader Installation

1. Unpack the reader.
2. Place the reader on a desktop.
3. Connect the antenna to antenna Port 1.



4. Connect the Ethernet cable to the Ethernet port.

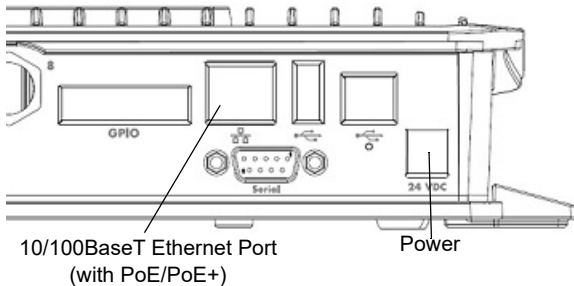


**NOTE** Connecting the reader to a subnet that supports DHCP is recommended. This installation procedure is not guaranteed to work if DHCP is disabled in the reader and if the reader is connected directly to a PC.

5. To connect to power:

- When using an AC power supply, connect the AC power supply to a power outlet and connect to the power port. When using a DC power supply, connect the DC power supply to a power outlet and connect to the power port.
- When using PoE or PoE+, plug the Ethernet cable into the PoE/PoE+ injector.

The green power LED remains lit after a successful power up.



## Connecting to the Reader

To connect via host name:

1. Open a browser. Refer to the FX Series RFID Fixed Reader Integration Guide for recommended browsers.
2. Enter the host name printed on the reader label in the browser address bar. If the label is missing or damaged, it is possible to create the host name by using the reader model name as prefix followed by the last six hex numbers from the MAC address. For example, for an FX9600 with the MAC address 0023683BA63A, the host name is FX96003BA63A. The string to enter in the browser address bar is <http://FX96003BA63A>.



**NOTE** Connect the reader to a network that supports host name registration and lookup to ensure the network can access the reader using the host name. For instance, some networks can register host names through DHCP. When first connecting to the reader, it is recommended to keep DHCP enabled in both the PC and in the reader, although it is not guaranteed that host name will work all the time.

3. If you are using a worldwide device, go to **Configure Reader > Region** to set the country in which you are using the device.

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## Regulatory Information

This device is approved under Zebra Technologies Corporation.

This guide applies to Model Number FX9600.

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:

[www.zebra.com/support](http://www.zebra.com/support).

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

Zebra devices are professionally installed - the Radio Frequency Output Power will not exceed the maximum allowable limit for the country of operation.

Antennas: Use only the supplied or an approved replacement antenna.

Unauthorized antennas, modifications, or attachments could cause damage and may violate regulations.

Declared maximum operating temperature: 55°C. (50°C when powered by DC Power supply.)

## Wireless Devices Country Approvals

Regulatory markings, subject to certification, are applied to the device signifying the radio(s) are approved for use in the following countries: United States, Canada, Japan, China, South Korea, Australia, and Europe<sup>1</sup>.

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

Note<sup>1</sup>: 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, Switzerland and the United Kingdom.



**CAUTION** Operation of the device without regulatory approval is illegal.

## Country Selection

Select only the country in which the device will be used. Any other selection will make the operation of this device illegal.

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## Health and Safety Recommendations



### Warnings for Use of Wireless Devices

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 Hospitals

Wireless devices transmit radio frequency energy and may affect medical electrical equipment. When installed adjacent to other equipment, it is advised to verify that the adjacent equipment is not adversely affected.

### 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 from radio devices. For information on "International" human exposure to electromagnetic fields refer to the Zebra Declaration of Conformity (DoC) at [www.zebra.com/doc](http://www.zebra.com/doc).

For further information on the safety of RF energy from wireless devices, see [www.zebra.com/responsibility](http://www.zebra.com/responsibility) located under Corporate Responsibility.

## Europe

### ***Remote and Standalone Antenna Configurations***

To comply with EU RF exposure requirements, antennas that are mounted externally at remote locations or operating near users at stand-alone desktop or similar configurations must operate with a minimum separation distance of 34 cm from all persons.

## US

### ***Remote and Standalone Antenna Configurations***

To comply with FCC RF exposure requirements, antennas that are mounted externally at remote locations or operating near users at stand-alone desktop or similar configurations must operate with a minimum separation distance of 23 cm from all persons.

### Canada

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 35 cm between the radiator and your body.

NOTE IMPORTANTE: (Pour l'utilisation de dispositifs mobiles)

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 35 cm de distance entre la source de rayonnement et votre corps.

## Power Supply

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

**WARNING ELECTRICAL SHOCK:** Use only a Zebra approved, Certified ITE 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 an 802.3af or 802.3at compliant power source which meets local compliance requirements.

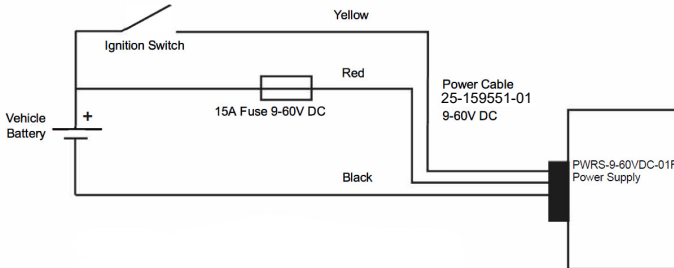
## 12 Volt Internal Combustion Engine Forklifts

Follow these instructions for connection of the PWRS-9-60VDC-01R DC-DC power supply to the forklift truck.



**NOTE** The FX9600 with PWRS-9-60VDC-01R power supply should only be installed by trained and authorized service personnel.

- All power wiring must use the supplied power cable.
- Fuses:
  - One 3AB, 15A, 250V, FST BLO fuse - 9-60V DC.
- Keep the path between the battery and the power supply as short as possible, and away from any part of the ignition high tension system.



**IMPORTANT** If your vehicle is not equipped with an ignition switch, connect the yellow wire directly to the vehicle's positive source. Failure to comply, will not enable the computer operation.



**NOTE** See the vehicle Owner's Manual for specific wiring information.

1. Disconnect the vehicle battery.
2. Connect the red wire to the vehicle's positive power source. Connect the black wire to the vehicle's negative power source.
3. Connect the yellow wire to the vehicle's ignition switch. If you do not plan on using the Ignition Sense feature, connect the yellow wire to the vehicle's positive power source.

## 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.



## Air Handling Space Applications

All Cables intended for interconnecting the FX9600 to other devices shall be suitable rated for use in Environmental Air Handling Space per UL 2043.

Devices such as Power Adapters, PoE (Power Injectors), antennas shall not be installed in the Environmental Air Handling Space unless they are suitable for use in the EAHS per UL 2043.

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## 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 into an outlet on a circuit different from that to which the receiver is connected
- 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.

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## Radio Frequency Interference Requirements - Canada

CAN ICES-3 (B)/NMB-3(B)

### Radio Transmitters

This device complies with Industry 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.

Le présent appareil est conforme aux CNR d'Industrie 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.

In accordance with the regulations of Industry Canada, this radio transmitter can operate with an antenna of a type and a maximum gain (or lower) approved for the transmitter by Industry Canada. With the aim of reducing the risk of radio interference to other users, the chosen antenna type and its gain should be selected so that the equivalent isotropically radiated power (e.i.r.p.) does not exceed the intensity necessary for the establishment of a satisfactory connection.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radio électrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

This radio transmitter has been approved by Industry Canada to operate with the antenna types listed below and having a maximum gain allowable and the impedance required for each type of antenna. The antenna types not included in this list, or whose gain is higher than the maximum gain indicates, are strictly prohibited for the operation of the transmitter.

Le présent émetteur radio a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

Circular polarized plate 6dBi 50 ohms

## CE Marking and European Economic Area (EEA)

### 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: [www.zebra.com/doc](http://www.zebra.com/doc).

### Other Countries

#### Korea Warning Statement for Class B ITE

기종별	사용자안내문
B급 기기 (가정용 방송통신기자재)	이 기기는 가정용 (B급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.

#### Brazil (UNWANTED EMISSIONS - ALL PRODUCTS)

Declarações Regulamentares para FX9600 - Brazil

Nota: A marca de certificação se aplica ao Transceptor, modelo FX9600. Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.

Para maiores informações sobre ANATEL consulte o site: [www.anatel.gov.br](http://www.anatel.gov.br).

#### China

通过访问以下网址可下载当地语言支持的产品说明书

[www.zebra.com/support](http://www.zebra.com/support)

合格证：



## *Eurasian Customs Union*

# Евразийский Таможенный Союз

Данный продукт соответствует требованиям знака ЕАС.



## Taiwan

臺灣

低功率電波輻射性電機管理辦法

### 第十二條

經型式認證合格之低功率射頻電機，非經許可，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。

### 第十四條

低功率射頻電機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。

前項合法通信，指依電信規定作業之無線電通信。

低功率射頻電機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。

### 無線接入點 (專業安裝)

- 「本公司於說明書中提供所有必要資訊以指導使用者 / 安裝者正確的安裝及操作」警語。  
並於該中文使用說明書及器材上標示
- 「本器材須經專業工程人員安裝及設定，始得設置使用，且不得直接販售給一般消費者」警語。

Circular polarized plate 6dBi 50 ohms

Frequency: 922MHz – 928MHz / EIRP 36dBm

## Ukraine

Дане обладнання відповідає вимогам технічного регламенту №1057, № 2008 на обмеження щодо використання деяких небезпечних речовин в електричних та електронних пристроях.

## Thailand

เครื่องโทรคมนาคมและอุปกรณ์ นี้ มีความสอดคล้อง อดตามขั้ อกำหนดของ กททช .



## Waste Electrical and Electronic Equipment (WEEE)

**English:** For EU Customers: All products at the end of their life must be returned to Zebra for recycling. For information on how to return product, please go to: [www.zebra.com/weee](http://www.zebra.com/weee).

**Français:** Clients de l'Union Européenne: Tous les produits en fin de cycle de vie doivent être retournés à Zebra pour recyclage. Pour de plus amples informations sur le retour de produits, consultez : [www.zebra.com/weee](http://www.zebra.com/weee).

**Español:** Para clientes en la Unión Europea: todos los productos deberán entregarse a Zebra al final de su ciclo de vida para que sean reciclados. Si desea más información sobre cómo devolver un producto, visite: [www.zebra.com/weee](http://www.zebra.com/weee).

**Български:** За клиенти от ЕС: След края на полезния им живот всички продукти трябва да се връщат на Zebra за рециклиране. За информация относно връщането на продукти, моля отидете на адрес: [www.zebra.com/weee](http://www.zebra.com/weee).

**Deutsch:** Für Kunden innerhalb der EU: Alle Produkte müssen am Ende ihrer Lebensdauer zum Recycling an Zebra zurückgesandt werden. Informationen zur Rücksendung von Produkten finden Sie unter [www.zebra.com/weee](http://www.zebra.com/weee).

**Hrvatski:** Za kupce u Europskoj uniji: Svi se proizvodi po isteku vijeka trajanja moraju vratiti tvrtki Zebra na recikliranje. Informacije o načinu vraćanja proizvoda potražite na web-stranici: [www.zebra.com/weee](http://www.zebra.com/weee).

**Italiano:** per i clienti dell'UE: tutti i prodotti che sono giunti al termine del rispettivo ciclo di vita devono essere restituiti a Zebra al fine di consentirne il riciclaggio. Per informazioni sulle modalità di restituzione, visitare il seguente sito Web: [www.zebra.com/weee](http://www.zebra.com/weee).

**Português:** Para clientes da UE: todos os produtos no fim de vida devem ser devolvidos à Zebra para reciclagem. Para obter informações sobre como devolver o produto, visite: [www.zebra.com/weee](http://www.zebra.com/weee).

**Nederlands:** Voor klanten in de EU: alle producten dienen aan het einde van hun levensduur naar Zebra te worden teruggezonden voor recycling. Raadpleeg [www.zebra.com/weee](http://www.zebra.com/weee) voor meer informatie over het terugzenden van producten.

**Polski:** Klienci z obszaru Unii Europejskiej: Produkty wycofane z eksploatacji należy zwrócić do firmy Zebra w celu ich utylizacji. Informacje na temat zwrotu produktów znajdują się na stronie internetowej [www.zebra.com/weee](http://www.zebra.com/weee).

**Čeština:** Pro zákazníky z EU: Všechny produkty je nutné po skončení jejich životnosti vrátit společnosti Zebra k recyklaci. Informace o způsobu vrácení produktu najdete na webové stránce: [www.zebra.com/weee](http://www.zebra.com/weee).

**Eesti:** EL klientidele: kõik tooted tuleb nende eluea lõppedes tagastada taaskasutamise eesmärgil Zebra'ile. Lisainformatsiooni saamiseks toote tagastamise kohta külastage palun aadressi: [www.zebra.com/weee](http://www.zebra.com/weee).

**Magyar:** Az EU-ban vásárlóknak: Minden tönkrement terméket a Zebra vállalathoz kell eljuttatni újrahasznosítás céljából. A termék visszajuttatásának módjával kapcsolatos tudnivalóként látogasson el a [www.zebra.com/weee](http://www.zebra.com/weee) weboldalra.

**Svenska:** För kunder inom EU: Alla produkter som uppnått sin livslängd måste returneras till Zebra för återvinning. Information om hur du returnerar produkten finns på [www.zebra.com/weee](http://www.zebra.com/weee).

**Suomi:** Asiakkaat Euroopan unionin alueella: Kaikki tuotteet on palautettava kierrätettäväksi Zebra-yhtiöön, kun tuotetta ei enää käytetä. Lisätietoja tuotteen palauttamisesta on osoitteessa [www.zebra.com/weee](http://www.zebra.com/weee).

**Dansk:** Til kunder i EU: Alle produkter skal returneres til Zebra til recirkulering, når de er udtjent. Læs oplysningerne om returnering af produkter på: [www.zebra.com/weee](http://www.zebra.com/weee).

**Ελληνικά:** Για πελάτες στην Ε.Ε.: Όλα τα προϊόντα, στο τέλος της διάρκειας ζωής τους, πρέπει να επιστρέφονται στην Zebra για ανακύκλωση. Για περισσότερες πληροφορίες σχετικά με την επιστροφή ενός προϊόντος, επισκεφθείτε τη διεύθυνση [www.zebra.com/weee](http://www.zebra.com/weee) στο Διαδίκτυο.

**Malti:** Għal klijenti fl-EU: il-prodotti kollha li jkunu waslu fl-aħħar tal-ħajja ta' l-użu tagħhom, iridu jiġu rritornati għand Zebra għar-riciklaġġ. Għal aktar taġġirif dwar kif għandek tirritorna l-prodott, jekk jogħġbok żur: [www.zebra.com/weee](http://www.zebra.com/weee).

**Românesc:** Pentru clienții din UE: Toate produsele, la sfârșitul duratei lor de funcționare, trebuie returnate la Zebra pentru reciclare. Pentru informații despre returnarea produsului, accesați: [www.zebra.com/weee](http://www.zebra.com/weee).

**Slovenski:** Za kupce v EU: vsi izdelki se morajo po poteku življenjske dobe vrniti podjetju Zebra za reciklažo. Za informacije o vračilu izdelka obiščite: [www.zebra.com/weee](http://www.zebra.com/weee).

**Slovenčina:** Pre zákazníkov z krajín EU: Všetky výrobky musia byť po uplynutí doby ich životnosti vrátené spoločnosti Zebra na recykláciu. Bližšie informácie o vrátení výrobkov nájdete na: [www.zebra.com/weee](http://www.zebra.com/weee).

**Lietuvių:** ES vartotojams: visi gaminiai, pasibaigus jų eksploatacijos laikui, turi būti gražinti utilizuoti į kompaniją „Zebra“. Daugiau informacijos, kaip gražinti gaminių, rasite: [www.zebra.com/weee](http://www.zebra.com/weee).

**Latviešu:** ES klientiem: visi produkti pēc to kalpošanas mūža beigām ir jānogādā atpakaļ Zebra atreizējai pārstrādei. Lai iegūtu informāciju par produktu nogādāšanu Zebra, lūdzu, skatiet: [www.zebra.com/weee](http://www.zebra.com/weee).

**Türkçe:** AB Müşterileri için: Kullanım süresi dolan tüm ürünler geri dönüştürme için Zebra'ya iade edilmelidir. Ürünlerin nasıl iade edileceği hakkında bilgi için lütfen şu adresi ziyaret edin: [www.zebra.com/weee](http://www.zebra.com/weee).

## **TURKISH WEEE Statement of Compliance**

EEE Yönetmeliğine Uygundur



PAP

[www.zebra.com](http://www.zebra.com)

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