# **FX7500 RFID Reader Quick Start Guide**



Zebra reserves the right to make changes to any product to improve reliability, function, or design.

Zebra does not assume any product liability arising out of, or in connection with, the application or use of any product, circuit, or application described berein

No license is granted, either expressly or by implication, estoppel, or otherwise under any patent right or patent, covering or relating to any combination, system, apparatus, machine, material, method, or process in which Zebra products might be used. An implied license exists only for equipment, circuits, and subsystems contained in Zebra products.



Zebra Technologies Corporation Lincolnshire, IL U.S.A. www.zebra.com

© 2018 ZIH Corp and/or its affiliates. All rights reserved. ZEBRA and the stylized Zebra head are trademarks of ZIH Corp, registered in many jurisdictions worldwide. All other trademarks are the property of their respective owners.



MN000070A07 Revision A — June 2018

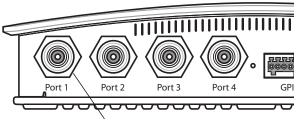
#### Introduction

FX7500 Series readers provide real time, seamless tag processing for EPC Class1 Gen2 compliant tags. This Quick Start Guide provides information about installing and connecting the reader. For more information refer to the FX Series RFID Fixed Reader Integration Guide, available at:

www.zebra.com/support.

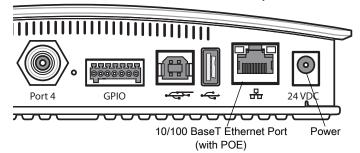
#### Reader Installation

- 1. Unpack the reader.
- 2. Set up the reader and tags on a desktop.
- 3. Connect the antenna to antenna Port 1.



Antenna Port 1

4. Connect the Ethernet cable to the Ethernet port. 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.



Connect the AC power supply to a power outlet and connect to the power port

,

7

**NOTE** This step is not required for networks supporting Power-over-Ethernet (POE).

The green power LED remains lit after successfully powering 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, provided on a label on the reader, in the browser (e.g., http://fx7500cd3b0d) and press **Enter**. The **User Login** window appears and the reader is ready.



1

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.

If the host name label is missing, construct the host name using the reader MAC address on the bottom of the reader. To do this, enter the prefix FX7500, followed by the last six characters of the MAC address. For example, for a MAC address of 0023683BA63A, use the prefix FX7500, followed by 3BA63A.

Enter http://FX75003BA63A in the browser address bar to access the reader.

If the host name method does not work, refer to the section, Connecting to the Reader in the FX Series RFID Fixed Reader Integration Guide for other connection options.

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

# **Additional Information**

Following are links to additional information and software:

Product Manuals available at: www.zebra.com/support

- FX Series RFID Fixed 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)
- Data Sheet: www.zebra.com/FX7500.
- PowerSession and other related software: www.zebra.com/support.

# **Regulatory Information**

This provides information for the Zebra, FX series RFID Reader products, Regulatory Model No: FX7500. For information on setting up and using the reader, refer to the FX Series RFID Fixed Reader Integration Guide at <a href="https://www.zebra.com/support">www.zebra.com/support</a>.

All Zebra devices are designed to be compliant with rules and regulations in locations they are sold and will be labeled as required. Local language translations are available at the following website: www.zebra.com/support.

Zebra devices must be professionally installed. The Radio Frequency Output Power will not exceed the maximum allowable limit for the country of operation. Any changes or modifications to Zebra equipment, not expressly approved by Zebra, could void the authority to operate the equipment.

#### Antennas

Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could cause damage and may violate regulations.

# Safety Information

# Reducing RF Exposure - Use Properly

Only operate the device in accordance with the instructions supplied.

♠ FCC / EU RF Exposure Guidelines

# 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 <a href="https://www.zebra.com/doc">www.zebra.com/doc</a>.

For further information on the safety of RF energy from wireless devices, see <a href="responsibility.zebra.com/index.php/downloads/">responsibility.zebra.com/index.php/downloads/</a>, which is located under Wireless Communications and Health.

#### **US and Canada**

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 34 cm from all persons.

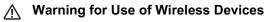
#### ΕU

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.

# Power Supply

This device must be powered from an 802.3af or 802.3at compliant power source which has been certified by the appropriate agencies, or by a Zebra approved UL LISTED ITE (IEC/EN60950-1) power supply with electrical ratings: Output 24Vdc, min 3.25A, with a recommended ambient temperature of at least 40 degrees C. Use of alternative power supply will invalidate any approvals given to this unit and may be dangerous.

# **Health and Safety Recommendations**



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

# **Potentially Hazardous Atmospheres**

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.

#### **Use With Hearing Aids**

When some wireless devices are used near some hearing devices (hearing aids and cochlear implants), users may detect a buzzing, humming, or whining noise. Some hearing devices are more immune than others to this interference noise, and wireless devices also vary in the amount of interference they generate. In the event of interference you may want to consult your hearing aid supplier to discuss solutions.

#### 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.

# Air Handling Space Applications

This device is suitable for use in Environmental Air Handling Space (EAHS) in accordance with Section 300-22(c) of the National Electric Code, and Sections 2-128, 12-010(3) and 12-100 of the Canadian Electrical Code, Part 21, CSA C22.1.

All Cables intended for interconnecting the FX7500 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.

# **Wireless Devices Country Approvals**

Regulatory markings, subject to certification, are applied to the device signifying the radio is 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 <a href="https://www.zebra.com/doc">www.zebra.com/doc</a>.



Operation of the device without regulatory approval is illegal.

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.

### Country Selection - Worldwide Version Only

Select only the country in which you are using the device. Any other selection will make the operation of this device illegal.

2

# Frequency of Operation – USA (FCC) and Canada

The range of channels is limited by firmware.

### 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.

# Radio Frequency Interference Requirements - Canada

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

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du

# Radio Transmitters

Canada.

This device is in compliance with the NRC for Industry Canada applicable to license-exempt radios. Use is allowed with the following two conditions: (1) the device must not produce interference, and (2) the device must accept any interference to the radio even if the interference is likely to compromise operation

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.

Label Marking: The Term "IC:" before the radio certification only signifies that Industry Canada technical specifications were met.

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.

The FX7500 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 indicated, are strictly prohibited for the operation of the transmitter.

Le FX7500 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 +6.6dBiL 50ohms

# C € Marking and European Economic Area (EEA)

# **Statement of Compliance**

Zebra hereby declares that this radio equipment is in compliance with Directive 2011/65/EU and 1999/5/EC or 2014/53/EU (2014/53/EU supersedes 1999/5/EC from 13th June 2017).

The full text of the EU Declaration of Conformity is available at the following internet address: <a href="https://www.zebra.com/doc">www.zebra.com/doc</a>.

# **Country Approvals**

#### Brasi

Declarações Regulamentares para FX7500 - Brasil

Nota: A marca de certificação se aplica ao Transceptor, modelo FX7500. 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: www.anatel.gov.br

#### Chile

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

#### hina

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/contact

#### **Korea Warning Statement for Class B ITE**

기 종 별	사 용 자 안 내 문
B 급 기기	이 기기는 가정용 (B 급 ) 전자파적합기기로서 주로
(가정용	가정에서 사용하는 것을 목적으로 하며 , 모든 지역에서
방송통신기자재)	사용할 수 있습니다 .

#### 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。

Operation of the device without regulatory approval is illegal.

# Thailand

้ เครื่ องโทรคมนาคมและอปกรณนี้ มี ความสอดคล้ องตามข้ อกำหนดของ กทช .

#### Ukraine

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

# **Eurasian Customs Union**



Евразийский Таможенный Союз

Данный продукт соответствует требованиям знака ЕАС.

# 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.

**Bulgarish:** 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.

Čeština: Pro zákazníky z EU: Všechny produkty je nutné po skonèení jejich životnosti vrátit spoleènosti Zebra k recyklaci. Informace o způsobu vrácení produktu najdete na webové stránce: 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.

**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.

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.gro.λιαδίκτυο

**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.

**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.

**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.

**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.

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. Latviešu: ES klientiem: visi produkti pēc to kalpošanas mūža beigām ir jānogādā atpa-kaļ Zebra otrreizējai pārstrādei. Lai iegūtu informāciju par produktu nogādāšanu Zebra, lūdzu. skatiet: www.zebra.com/weee.

**Lietuvių:** ES vartotojams: visi gaminiai, pasibaigus jų eksploatacijos laikui, turi būti grąžinti utilizuoti į kompaniją "Zebra". Daugiau informacijos, kaip grąžinti gaminį, rasite: www.zebra.com/weee.

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

Malti: Għal klijenti fl-UE: il-prodotti kollha li jkunu waslu fl-aħħar tal-ħajja ta' l-użu tagħhom, iridu jiġu rritornati għand Zebra għar-riċiklaġġ. Għal aktar tagħrif dwar kif għandek tirritorna l-prodott, jekk jogħġbok żur: 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 voor meer informatie over het terugzenden van producten. **Polski:** Klienci z obszaru Unii Europejskiej: Produkty wycofane z eksploatacji nale¿y zwróciæ do firmy Zebra w celu ich utylizacji. Informacje na temat zwrotu produktów znajduj¹ siê na stronie internetowej 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.

Românesc: Pentru clienţii din UE: Toate produsele, la sfârşitul duratei lor de funcţionare, trebuie returnate la Zebra pentru reciclare. Pentru informaţii despre returnarea produsului accesații 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 náidete na: 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 vraèilu izdelka obišèite:

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.

**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.

**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.

# **TURKISH WEEE Statement of Compliance**

EEE Yönetmeligine Uygundur

#### China RoHS

This table was created to comply with China RoHS requirements.

		10)				
部件名称 (Parts)	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)	Х	0	0	0	0	0
电路模块 (Circuit Modules)	Х	0	0	0	0	0
电缆及电缆组件 (Cables and Cable Assemblies)	0	0	0	0	0	0
塑料和聚合物部件 (Plastic and Polymeric Parts)	0	0	0	0	0	0
光学和光学组件 (Optics and Optical Components)	0	0	0	0	0	0
电池 (Batteries)	0	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。)

This table was created to comply with China RoHS requirements.

# **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 Zebra Support at: <a href="https://www.zebra.com/support">www.zebra.com/support</a>.

For the latest version of FX7500 guides and software, go to: www.zebra.com/support.

#### Warranty

For the complete Zebra hardware product warranty statement, go to: <a href="https://www.zebra.com/warranty">www.zebra.com/warranty</a>.

#### For Australia Only:

For Australia Only. This warranty is given by Zebra Technologies Asia Pacific Pte. Ltd., 71 Robinson Road, #05-02/03, Singapore 068895, Singapore. Our goods come with guarantees that cannot be excluded under the Australia Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Zebra Technologies Corporation Australia's limited warranty above is in addition to any rights and remedies you may have under the Australian Consumer Law. If you have any queries, please call Zebra Technologies Corporation at +65 6858 0722. You may also visit our website: <a href="https://www.zebra.com">www.zebra.com</a> for the most updated warranty terms.

5