



RFID Data Management Pro for Fixed Readers

Installation Guide

June 2017 Version 2.40

Preface

This document explains the procedure of the installation and the Confirmation of RFID Data Management Pro for Fixed Readers (Hereafter, it is written, "This tool"). Be sure to read this document before using this tool.

■ Abbreviations and generic terms used in documents for Fujitsu RFID Integrated Label Solution

The documents use the following abbreviations and generic terms.

Name	Abbreviation used in this document
Microsoft® Windows® 7 Professional	"Windows 7"
Microsoft® Windows® 8.1 Professional	"Windows 8.1"
Microsoft® Windows® 10 Professional	"Windows 10"
Terminals where Windows 7, Windows 8.1, or Windows 10 has been installed Personal computer	"PC"
Reader/writer devices	"Reader device"
RFID tags	"Tag"
Fujitsu's RFID Integrated Label - 8Kbyte (Large/Medium/Small)	"Large capacity RFID tag" or "high memory tag"
Fujitsu's RFID Integrated Label - 1Kbyte (Large/Medium/Small) Fujitsu's 2-kilobit RFID tags	"Tag"

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■ ATA (Air Transport Association of America) Spec 2000 Chapter 9-5

 This tool is designed to read and write data from and to tags in compliance with the specification for Radio Frequency Identification (RFID) on Parts in ATA Spec2000 Chapter 9-5.

High Risk Activity

• This product is designed and manufactured as contemplated for general use, including without limitation, general office use, personal use and household use, but is not designed and manufactured as contemplated for use accompanying fatal risks or dangers that, unless extremely high safety is secured, could lead directly to death, personal injury, severe physical damage or other loss (hereinafter called "High Safety Required Use"), including without limitation, nuclear reaction control, aircraft flight control, air traffic control, mass transport control, life support, and weapon launch control. The customer shall not use this product without securing the sufficient safety required for the High Safety Required Use.

Notes on export procedures

• When exporting or providing this product and this document, check the regulations under the Foreign Exchange and Foreign Trade Law and the laws and regulations relating to US export control, and complete the necessary procedures.

Screenshots and illustrations

- The screenshots and illustrations in this document are only examples, and the actual screens may be slightly different depending on the environment that you are using.
- The screenshots used in the explanations in this document are from a Windows 8.1 environment.

How to obtain third-party software (such as Zebra / Motorola products)

• For information about how to obtain third-party software, make inquiries with Fujitsu Customer Support.

Other Notes

- No part of this document may be reproduced or reused for other purposes without the express written permission of Fujitsu Limited.
- The content of this document may change without prior notice.

Edition	Date issued	Changes
Version 1.00	April 2014	This manual separated from the user's guide.
Version 1.10	June 2014	Changed product name
Version 2.20	October 2014	Commercialization version
Version 2.30	March 2015	Support for Windows 8.1
Version 2.31	June 2015	Installation procedure changed
Version 2.32	October 2015	Installation procedure changed & FX7500 addition
Version		Function enhancement
2.33		1) Support for the EPC format for non-serialized parts
	October 2016	2) Support for Windows 10
		3) Function addition of logging the written data on tag in
		XML
Version 2.40	June 20th 2017	Enhancement for ATA Spec 2000 Rev.2016 support.

Revision history

CONTENTS

1 Overview	1
1.1 Installation Procedure Overview	1
1.2 Update Procedure Overview	1
1.3 Uninstallation Procedure Overview	1
1.4 Installation Prerequisites	2
1.4.1 PC	2
1.4.2 RFID Reader	2
2 Installation	3
2.1 Install the RFID Data Management Pro for Fixed Readers	3
2.2 License Activation	6
2.2.1 Commercial License	6
2.2.2 Trial License	8
3 Set up Zebra FX7500	10
4 Uninstallation	17
4.1 Uninstall the RFID Data Management Pro for Fixed Readers	17
4.2 Uninstall the FMDK for C	

1.1 Installation Procedure Overview

The following shows the overview of installation operations.

- **Reference:** If an older version of this tool is already installed and you want to update it, please refer to the section 1.2 Update Procedure Overview.
 - Install EMDK for C and setup / configure the FX7500 Fixed Reader (refer to the section 3 Set up Zebra FX7500)
 - (2) Install RFID Data Management Pro for Fixed Readers (refer to the section 2.1 Install the RFID Data Management Pro for Fixed Readers)

1.2 Update Procedure Overview

The update procedure from older version to V01L02R1 is as below.

! Caution • If additional TEIs are configured, it will be necessary to manually reconfigure them after the software update.

- > In the case that additional TEIs are configured;
 - (1) Confirm the existing additional TEIs in TEI Settings application before updating.
 - (2) Uninstall the older version of the RFID Data Management Pro (refer to the uninstallation procedure in the installation guide for the currently installed version).
 - (3) Reinstall the latest version of the RFID Data Management Pro (refer to the section 2.1 Install the RFID Data Management Pro for Fixed Readers).
 - (4) Reconfigure the additional TEI.

> In the case that no additional TEIs are configured;

- (1) Uninstall the older version of the RFID Data Management Pro (refer to the uninstallation procedure in the installation guide for the currently installed version).
- (2) Reinstall the latest version of the RFID Data Management Pro (refer to the section 2.1 Install the RFID Data Management Pro for Fixed Readers).

1.3 Uninstallation Procedure Overview

Refer to the section 4 Uninstallation.

1.4 Installation Prerequisites

The following hardware and settings are required to install and use this tool.

1.4.1 PC

1.4.1.1 Hardware Requirements

Hardware	Description
CPU	A CPU with a 1.0 GHz processor or higher (manufactured by Intel or AMD)
Memory	1 GB or more
Hard disk capacity	400 MB or more
Text resolution	96 DPI
Display size	XGA (1024 x 768) or higher

□ **Reference:** •Administrator rights on the PC are necessary to install this tool.

1.4.1.1 Software Requirements

- Windows 7 Professional Service Pack 1 (32-bit edition & 64bit edition), Windows 8.1
 Professional (32-bit edition & 64bit edition) or Windows 10 Professional (32-bit edition & 64bit edition)
- Internet Explorer 10
- In the case of Windows 8 or later version, install .Net Framework 3.5 (includes .Net 2.0 and 3.0) in advance.
- EMDK for C v2.8 (available at: Zebra Technologies Web site)
- RFID Data Management Pro for Fixed Reader (provided with the CD)

1.4.2 RFID Reader

Manufacturer	Туре	Model
Zebra Technologies	Fixed Reader	FX7500

2.1 Install the RFID Data Management Pro for Fixed Readers

If the following operating procedure completes normally, the RFID Data Management Pro for Fixed Readers will have been installed.

Operating procedure

- (1) Turn on the PC where this tool is to be installed and log in as either the PC administrator or a member of the Administrators group.
- (2) Perform the procedure in section "3 Set up Zebra FX7500".
- (3) In the case of Windows 8 or later version, install .Net Framework 3.5 (includes .Net 2.0 and 3.0) in advance.
- (4) Insert the setup CD that comes with this tool into the CD drive on the PC.
- (5) Open the CD using Explorer, and then double-click "Setup.exe" in the "Module" folder.

 If the PC does not have a CD drive, use another PC to copy the content of the "Module" folder on the CD to USB memory (or a similar device), and then execute "Setup.exe" from there.

(6) The installation starts.

RFID Data Management Pro for Fixed Readers - InstallShield Wizard	
ځ	Preparing to Install RFID Data Management Pro for Fixed Readers Setup is preparing the InstallShield Wizard, which will guide you
4	through the program setup process. Please wait. Extracting: RFID Data Management Pro for Fixed Readers.msi
	Cancel

(7) Click the Next button.



(8) Click the Install button.

😸 RFID Data Management Pro for Fixed Readers - InstallShield Wiz
Ready to Install the Program The wizard is ready to begin installation.
If you want to review or change any of your installation settings, dick Back. Click Cancel to exit the wizard. Current Settings:
Setup Type: Typical
Destination Folder: C:\Program Files\Fujitsu\AIT\RFID Data Management Pro for Fixed Readers\
User Information: Name: AIT-User
InstallShield
< Back Install Cancel

(9) If the following warning dialog box is displayed, click the **Yes**.



(10) After the installation completes, click the **Finish** button.



(11) When the installation completes, Fujitsu / RFID Data Management Pro will be registered under the Start / Programs menu. The following icon will also be created on the desktop: RFID Data Management Pro for Fixed Readers.

ΤοοΙ	Name of the desktop icon
RFID Data Management Pro	RFID Data Management Pro for Fixed Readers

(12) Remove the setup CD from the PC.

(13) Restart the PC manually.

This completes the installation procedure for this tool.

2.2 License Activation

This section explains about licensing of this tool. The license key is required to activate this tool and the procedure to receive the "License Key" is explained in section "2.2.1 Commercial License". This tool also provides the trial license for 30-day use without "License Key" and the procedure to start this tool in trial use is explained in section "2.2.2. Trial License".

2.2.1 Commercial License

(1) Click the "RFID Data Management Pro for Fixed Readers" icon.



(2) Check the "Registration ID" and send the information to Fujitsu Customer Support.

License Activation	×
If you have a commercial li Fujitsu Technical Support i License Key, please enter activate this software.	ense for this software, please send the Registration ID shown below to order to receive the your license key. Once you have received your into the License Key field below and dick the Activate Now button to
If you want to use this sof access to this application f clicked.	vare in trial mode, please click the Trial Use button. You will have full • a 30 day trial period which will begin as soon as the Trial Use button is
Registration ID:	*****
License Key:	
Trial Use	Activate Now

- ♦ Reference: •After receiving the "Registration ID", Fujitsu Customer Support will send the "License Key" by email.
 - •While waiting the license key, it is also possible to use this tool as trial mode. (refer to 2.2.2 Trial License)

(3) Enter the License Key and click the Activate Now button.



(4) RFID Data Management Pro for Fixed Readers will start up.



2.2.2 Trial License

(1) Click the "RFID Data Management Pro for Fixed Readers" icon.



(2) Click the **Trial Use** button.

License Activation	a second	x
If you have a commercial lice Fujitsu Technical Support in License Key, please enter it activate this software.	ense for this software, please send the Registra order to receive the your license key. Once you into the License Key field below and click the Ac	ation ID shown below to J have received your tivate Now button to
If you want to use this softw access to this application for clicked.	vare in trial mode, please dick the Trial Use but a 30 day trial period which will begin as soon a	ton. You will have full s the Trial Use button is
Registration ID:	****	
License Key:		
Trial Use		Activate Now

(3) Click the **OK** button.



(4) RFID Data Management Pro(DEMO) will start up.



This section explains the installation and setup procedure for the Zebra FX7500.

Note: Refer to the FX7500 RFID Reader Integrator Guide provided by Zebra for details.

- Operating procedure
 - Install EMDK for C (available at: Zebra Technologies Web site).
 Execute EMDK Installer and then follow the wizard to install EMDK for C as follows.
 - (2) Click the **Next** after the installation wizard comes up.

Motorola EMDI	K for C Setup
<u>~</u>	Thank you for choosing Motorola to help you develop your enterprise mobility solution. This installation wizard will guide you through the steps necessary to setup Motorola EMDK for C v2.8 on your computer. To continue, click next.
	Cancel Nullsoft Install System v2,46

(3) Read and accept the license agreement and click the I Agree.



(4) Click the Install.

🐼 Motorola El	MDK for C Setup: Installation Folder
	Setup will install Motorola EMDK for C in the following folder. To install in a different folder, click Browse and select another folder. Click Install to start the installation.
	Destination Folder C: Program Files (x86) Motorola EMDK for C Browse
	Space required: 32.4MB
	Space available: 208.1GB
	Cancel Nullsoft Install System v2,46

(5) Click the box if you want to view the readme file and click the Finish.

🙆 Motorola EMDI	K for C Setup
	Installation completed successfully.
<u>&</u>	would like to view the README file.
	Cancel Nullsoft Install System v2,46 < <u>B</u> ack Finish

(6) Connect the PC and the FX7500. Connect the FX7500 to the PC via the LAN.



- (7) Configure network connection settings on the PC side. (Part 1)
 - Select the Start > Control Panel > Network and Sharing Center > Change adapter settings. Then right-click the Local Area Connection and select the Properties.
 - 2. In the Local Area Connection Properties window, select the Internet Protocol Version 4 (TCP/IPv4), and then click the Properties button.
 - 3. Select the Obtain an IP address automatically radio button.
- (8) Confirm the network connection settings on the PC side (Part 2)
 - Open a command prompt and execute ">ipconfig". Make sure that the IP address "169.254.xxx.xxx" has been allocated. Note: It may take some time before the IP address is assigned.

Note: If the **Obtain IP Address via DHCP** (described below) is set to **Off** then an IP address will not be assigned. In this case, make inquiries with the administrator of the FX7500 in question to verify the fixed IP address. Then set an IP address on the same network as the IP address specified in Step 4, "Configure network connection settings on the PC side (Part 1)".

- (9) Log in to the FX7500.
 - 1. Start a Web browser, enter "http://FX7500xxxxx" in the URL field, and then press <Enter>.

Note: For "xxxxx", see the label attached to the case of the FX7500.



2. Log in by entering the following user name and password in the login window that is displayed.

User Name \rightarrow admin Password \rightarrow change

O (C) http://192.168.102.154/index.htm	– ロ × ශි ශි [@]
覚 ZEBRA	FX7500
Reader Administration Console	
User Login User Name: admin v Password: ************************************	
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- (10) Set up the IP address for the FX7500.
 - 1. Select the **Communication** from the list on the left-hand side.
 - 2. Change the Obtain IP Address via DHCP from On to Off.
 - 3. Set the IP address assigned by network administrator for the **Current IP Address**. The default address is set as "169.254.10.1".
 - 4. Set the **Subnet Mask** corresponding to the IP adress. The default mask is set as "255.255.0.0".
 - 5. If the **Current IP Address** is set as an address other than the default address, open "DeviceProviders.config" under the installation folder of RFID Data Management Pro and add the following element under <Provider>element.

<TargetIPAddress_Port>IP Address:5084</TargetIPAddress_Port>

Operation Statistics Configure Reader	Configure Network Settings				
Read Tags	Ethernet	Wi-Fi	Bluetooth		
- Communication	Ethomot		Didetootii		
LLRP	IPv4		(Obtain IPV4	
SNMP	IPv6			Address via	Off -
Wireless				Current IPV4	
Services				address	192.168.102.154
Date Time				IPV4 Subnet	255,255,255,0
IP Sec				Mask:	
Change Password				IPV4 Gateway:	0.0.0.0
GPIO				IPV4 DNS	0.0.0.0
Applications				Server:	
Profiles			<u> </u>	MAC Address:	4C:CC:34:02:AB:A6
▶ Firmware					Set
Commit/Discard					Dreparties
▶ System Log					Properties
Diagnostics					

◆ **Reference:** • The "DeviceProviders.config" is stored in the following folder;

- In the case of 32-bit PC:
 - "C:\Program Files\Fujitsu\AIT\RFID Data Management Pro for Fixed Readers"
- In the case of 64-bitPC: "C:\Program Files (x86)\Fujitsu\AIT\RFID Data Management Pro for Fixed Readers"
- •Because it is prohibited to directly modify files under the Program Files, please copy the "DeviceProviders.config" to another location such as the "Documents" folder. And then, edit the file and relocate it to the original folder.
- ·If the warning dialog of User Account Control, click the Yes.

- (11) Apply the IP address settings for the FX7500.
 - 1. Select the **Commit/Discard** from the list on the left-hand side.
 - 2. Click the **Commit** button.
 - 3. Restart the FX7500 (disconnect and connect to Power again,After the green LED on the Reader is lightning please logon to the Reader again.

TEBRA	1	FX7500
Home	Configuration Commit/Discard	Save Changes (or Revert to Backup)
Puppiagon Duringson Configure Rader Read Tag Communication LLRP Writeless Services Date Time Date Time Date Time Pice Change Researcd GPIO CommitDiscations Profiles P Internet Dispositions P Sector Shutdown Logost	Commit the Configuration Changes Locard the Configuration Changes Biscard the Config	When you add or make modifications to the logical view of your Reader Network using 1 Zebra RFID reader Administrator Consoles, the changes are not immediately upplied to your angues and the second second second second second connections. If you are also have the changes to commit Reverst page to aver the changes to update the running physical Reader and to update the running physical Reader works. White a successful update may take up to a mission of the complete physical Reader to update the complete physical Reader to update the complete physical Reader works. The successful update may take up to a mission of the complete physical Reader to update the complete physical Reader to operate with only a brief one or brocks second, citch to Discard button and your made to the Reader Network study this essain, citch the Discard button and your met recent Changes are discarded of commit changes Adves the uset for the conduction of the complete physical essain, citch the Discard button and your met recent Changes are discarded and commit changes presidently in the complete physical essain changes are discarded and commit changes presidently and the complete physical essain changes are discarded and commit the complete physical essain changes are discarded and commit the ender by the button and your essain changes are discarded and commit the reader by the button and the complete physical essain the complete physical and th

- (12) Set the port number for the FX7500.
 - 1. Select the **LLRP** from the list on the left-hand side.
 - 2. Set "5084" for the **Client Port**.
 - 3. After these settings are complete, select the **Logout** from the list on the left-hand side.

TEBR	A		FX7500
łome	Reader Communication	n Parameters	LLRP Settings
Status Operation			This page supports setting the LLRP configuration
Statistics	Configure LLRP Se	ttings	
Configure Reader			 LLRP status - Shows the current state of the LLRP server on the reader. Indicates
Read Tags	LLRP Status:	LLRP is running.	whether LLRP is running or not. • Operation Mode - Allows the user to
Communication	Operation Mode:	Server -	choose the LLPR mode in the reader. Ca
CHIND	Client IP:	192.168.102.90	De set to either "Server" or "Client".
Wirolose	Enable Secure mode:		Configuration options when LLRP in the reader is in "Server" mode
Ferrices	Validate peer:		In Gerver Indde.
Date Time	Client Port:	5084	 Client IP - Displays the currently connected LLRP client's IP address. If
P Sec	Allow LLRP Connection Override (From		there is no LLRP client connection this w
Change Password	USB IF):		 Client Port - Allows configuring the LLRF
SPIO	Connect Status:	Disconnect LLRP	listening port on the reader. Default is
Applications		Sat	Connect Status - Indicates whether the
Profiles		- Manager	client is connected or not. This button will be graved out if there is not client
Firmware		Properties	connected. If an LLRP client is connected to the mediate this button will be enabled
Commit/Discard			and clicking on the same will disconnect
System Log			the client.
nagnostics			Configuration options when LLRP in the reader is
onout			III Canin III000
ogout			 Server IP - Allows configuring the IP address of the server to connect to
			 Client Port - Allows configuring the LLRF
			nost port to connect to. Default is 5084.

- (13) Set up the fixed IP address for the PC.
 - Select hte Start > Control Panel > Network and Sharing Center > Change adapter settings. Then right-click the Local Area Connection and select the Properties.
 - 2. In the Local Area Connection Properties window, select the Internet Protocol Version 4 (TCP/IPv4), and then click the Properties button.
 - 3. Select the Use the following IP address radio button.
 - 4. For the **IP address**, set an IP address on the same network as "(10)Set up the IP address for the FX7500."
 - 5. For the **Subnet mask**, set the value corresponding to IP address.
 - 6. For the **Default gateway**, set the IP address that was set for the FX7500 in the step "(6) Set up the IP address for the FX7500". The default value is "169.254.10.1".
 - 7. Open a command prompt and execute the command ">ping IP Address".
- (14) If the ping command succeeds, then this means that the PC is connected to the FX7500.
- (15) A regional setting and the method of test of program operation of FX7500 are executed referring to the operating manual of FX7500.

4.1 Uninstall the RFID Data Management Pro for Fixed Readers

This section explains how to uninstall the RFID Data Management Pro for Fixed Readers.

Operating procedure

- (1) Select **Control Panel**, **Programs** and then **Programs and Features** from the **Start** menu.
- (2) Select **RFID Data Management Pro for Fixed Readers** from the **Uninstall or change a program** list, and then click the **Change** button. Click the **Next** button.

👼 RFID Data Managemer	nt Pro for Fixed Readers - InstallShield Wiz 🗙
2	Welcome to the InstallShield Wizard for RFID Data Management Pro for Fixed Readers
	The InstallShield(R) Wizard will allow you to modify, repair, or remove RFID Data Management Pro for Fixed Readers. To continue, dick Next.
41	
-	
	< Back Next > Cancel

(3) Select the **Remove** and then click the **Next** button.



(4) Click the **Remove** button.

🗒 RFID Data Management Pro for Fixed Readers - InstallShield Wiz 💌
Remove the Program You have chosen to remove the program from your system.
Click Remove to remove RFID Data Management Pro for Fixed Readers from your computer. After removal, this program will no longer be available for use.
If you want to review or change any settings, click Back.
InstallShield Cancel Cancel

(5) If the following warning dialog box is displayed, click the **Yes**.

•		User Account Control	
Û	Do you want to allow the following program from an unknown publisher to make changes to this computer?		
	Program name: Publisher: File origin:	C:\Windows\Installer\6207036.msi Unknown Hard drive on this computer	
•	Show <u>d</u> etails	<u>Y</u> es <u>N</u> o	
		Change when these notifications appear	

(6) Uninstallation of this tool will start.

👸 RFID D	ata Management Pro for Fixed Readers - InstalIS 🗕 🗖 🗙
Uninstalli The prog	ng RFID Data Management Pro for Fixed Readers ram features you selected are being uninstalled.
1 6	Please wait while the InstallShield Wizard uninstalls RFID Data Management Pro for Fixed Readers. This may take several minutes.
	Status:
	Removing backup files
InstallShield -	
	< <u>B</u> ack <u>N</u> ext >

(7) After the uninstallation completes, click the **Finish** button.

😸 RFID Data Management Pro for Fixed Readers - InstallShield Wiz		
	InstallShield Wizard Completed The InstallShield Wizard has successfully uninstalled RFID Data Management Pro for Fixed Readers. Click Finish to exit the wizard.	
	< Back Einish Cancel	

- (8) Check that the **RFID Data Management Pro for Fixed Readers** has been deleted from the **Currently installed programs** list.
 - Folders that contain the files created after the installation will not be deleted.
 - If these folders need to be deleted completely, use Explorer or some other file manager to directly delete the following folder.
 - "C:\Users\Public\RFID Data Management Pro"

"C:\Users\Public\Documents\Fujitsu\RFID Data Management Pro" - In the case of 32-bit PC:

- "C:\Program Files\Fujitsu\AIT\RFID Data Management Pro for Fixed Readers"
- In the case of 64-bitPC: "C:\Program Files (x86)\Fujitsu\AIT\RFID Data Management Pro for Fixed Readers"
- (9) Restart the PC manually.

! Caution

This completes the uninstallation procedure for this tool.

4.2 Uninstall the EMDK for C

This section explains how to uninstall the EMDK for C.

Operating procedure

- (1) Select **Control Panel**, **Programs** and then **Programs and Features** from the **Start** menu.
- (2) Select Motorola EMDK for C from the Uninstall or change a program list, and then click the Uninstall.
- (3) The following confirmation message is displayed. Click the YES button.

Motorola EMDK for C Uninstall
Samples folder will be deleted, please take backup if needed before proceeding with uninstallation. Permanantly remove Motorola EMDK for C ?
Yes <u>N</u> o

(4) Uninstallation of the EMDK for C will start.

🗑 Motorola EMDI	K for C Uninstall: Uninstalling
	Delete file: C:\Users\Public\Motorola EMDK for C\v2.8\Samples\SampHelpIm
&	
	Cancel Nullsoft Install System v2,46 <u>Close</u>

(5) Click the **Close** button.

Totorola EMD	(for C Uninstall: Completed
<u>~</u>	Completed
	Cancel Nullsoft Install System v2,46 < Back Close

- (6) Check that the Motorola EMDK for C has been deleted from the Currently installed programs list.
- (7) Restart the PC manually.

This completes the uninstallation procedure for the EMDK for C.