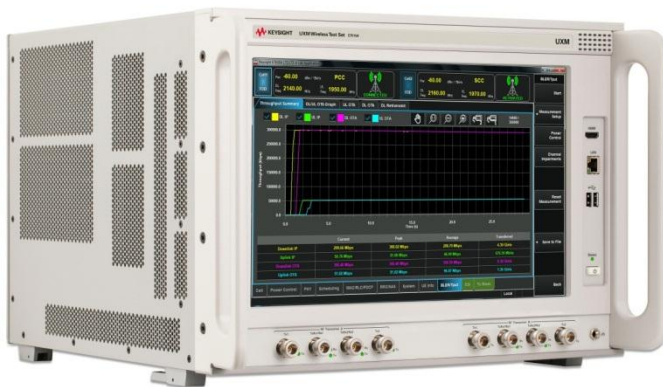


Keysight Internal Applications Server (E7515AU-S01)

For the E7515A UXM
Wireless Test Set



Installation
Guide

This page is intentionally left blank.

Notices

© Keysight Technologies, Inc. 2015

No part of this manual may be reproduced in any form or by any means (including electronic storage and retrieval or translation into a foreign language) without prior agreement and written consent from Keysight Technologies, as governed by United States and international copyright laws.

Warranty

THE MATERIAL CONTAINED IN THIS DOCUMENT IS PROVIDED "AS IS," AND IS SUBJECT TO BEING CHANGED, WITHOUT NOTICE, IN FUTURE EDITIONS. FURTHER, TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, KEYSIGHT DISCLAIMS ALL WARRANTIES, EITHER EXPRESS OR IMPLIED WITH REGARD TO THIS MANUAL AND ANY INFORMATION CONTAINED HEREIN, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. KEYSIGHT SHALL NOT BE LIABLE FOR ERRORS OR FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH THE FURNISHING, USE, OR PERFORMANCE OF THIS DOCUMENT OR ANY INFORMATION CONTAINED HEREIN. SHOULD KEYSIGHT AND THE USER HAVE A SEPARATE WRITTEN AGREEMENT WITH WARRANTY TERMS COVERING THE MATERIAL IN THIS DOCUMENT THAT CONFLICT WITH THESE TERMS, THE WARRANTY TERMS IN THE SEPARATE AGREEMENT WILL CONTROL.

Statement of Compliance.

This product has been designed and tested in accordance with accepted industry standards, and has been supplied in a safe condition. The documentation contains information and warnings that must be followed by the user to ensure safe operation and to maintain the product in a safe condition.

Manual Part Number

E7515-90013

Edition

February 20th, 2015
Documents Software Version 1.2.3.x

Published in USA

Keysight Technologies, Inc.

Technology Licenses

The hardware and/or software described in this document are furnished under a license and may be used or copied only in accordance with the terms of such license.

Restricted Rights Legend

If software is for use in the performance of a U.S. Government prime contract or subcontract, Software is delivered and licensed as "Commercial computer software" as defined in DFAR 252.227-7014 (June 1995), or as a "commercial item" as defined in FAR 2.101(a) or as "Restricted computer software" as defined in FAR 52.227-19 (June 1987) or any equivalent agency regulation or contract clause. Use, duplication or disclosure of Software is subject to Keysight Technologies' standard commercial license terms, and non-DOD Departments and Agencies of the U.S. Government will receive no greater than Restricted Rights as defined in FAR 52.227-19(c)(1-2) (June 1987). U.S. Government users will receive no greater than Limited Rights as defined in FAR 52.227-14 (June 1987) or DFAR 252.227-7015 (b)(2) (November 1995), as applicable in any technical data.

Safety Notices

The following general safety precautions must be observed during all phases of operation of this instrument. Failure to comply with these precautions or with specific warnings elsewhere in this manual violates safety standards of design, manufacture, and intended use of the instrument. Keysight Technologies, Inc. assumes no liability for the customer's failure to comply with these requirements.

CAUTION

A CAUTION notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a CAUTION notice until the indicated conditions are fully understood and met.

WARNING

A WARNING notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a WARNING notice until the indicated conditions are fully understood and met.

Electrical Rating for E7515A

Input Voltage Range:
100/120/220/240 V_{AC}

Input Frequency Range:
50/60Hz, nominal

Input Power Rating: 1100
Watts Max

Mains supply voltage
fluctuates up to
+/- 10% of the nominal
voltage.

Warranty

This Keysight Technologies instrument upgrade is warranted against defects in material and workmanship for three years. During the warranty period, Keysight Technologies will, at its option, either repair or replace products that prove to be defective. For warranty service or repair, this product must be returned to a service facility designated by Keysight Technologies. Buyer shall prepay shipping charges to Keysight Technologies. Keysight Technologies shall pay shipping charges to return the product to Buyer. However, Buyer shall pay all shipping charges, duties, and taxes for products returned to Keysight Technologies from another country.

Where to Find the Latest Information

Keysight will periodically update product documentation. For the latest information about this wireless test set, including software upgrades, operating and application information, and product and accessory information, see the following URL:

www.keysight.com/find/UXM-Manuals

Is your product software up-to-date?

Keysight will periodically release software updates to fix known defects and incorporate product enhancements. To search for software updates for your product, go to the Keysight Software Manager website at:

www.keysight.com/find/softwaremanager

Table of Contents

1	Introduction	7
2	Initial Inspection.....	8
	Verifying the Contents	8
	Shipping Problems?	8
3	Tools required for Installation	9
4	Installation of the Internal Applications Server	10
	Accepting End-User License Agreements	11
	ESD Information	14
	Protection from Electrostatic Discharge.....	14
	Handling of Electronic Components and ESD	15
	Test Equipment Usage and ESD	15
	For Additional Information about ESD	15
5	Troubleshooting	16
	Returning Components for Service	16
	Calling Keysight Technologies.....	16
	Locations for Keysight Technologies	16
	Service and Support	17

This page is intentionally left blank.

1 Introduction

This document describes how to install the Internal Applications Server (E7515AU-S01) in your E7515A UXM.





The Internal Applications Server (also known as the Server PC or SPC) is an additional personal computer that is easily installed in the rear-panel of the UXM. With this increased processor and disc-space functionality available to you outside the embedded PC of the UXM, you are able to utilize maximum speed and efficiency when performing User Equipment (UE) capability testing via the UXM.

The software application recommendations for installation on the Internal Applications Server are detailed in the **UXM Getting Started Guide** that you received with the shipment of your UXM and located on the web at www.keysight.com/find/UXM-Manuals.

2 Initial Inspection

Inspect the shipping container and the cushioning material for signs of stress. Retain undamaged shipping materials for future use.

Verifying the Contents

Item	Deliverable	Description
Internal Applications Server (E7515A-S01)		<i>Kontron AM4022-SA-2.1Q8-M-DP-S32</i> Discreet PC installed in the UXM rear-panel to run non-UXM TA/LA software. Specifications: <ul style="list-style-type: none"> • Intel Core i7-3612QE, 2.1 GHz • 8 GB Soldered Memory • Mid Size, 4xGbE, USB, DisplayPort • 64 GB onboard SATA-Flash
Internal Applications Server (E7515A-S01) Installation Guide		
Mini-USB-A plug / USB-A socket adapter		Plug this into the mini-usb to enable connection of the 4-port USB Hub.
4-port USB Hub unpowered		
Display port to VGA adapter		Enables you to view PC output on external display monitor

Shipping Problems?

If the shipping materials are damaged or the contents of the container are incomplete:
Contact the nearest Keysight Technologies office.

Keep the shipping materials for the carrier's inspection.


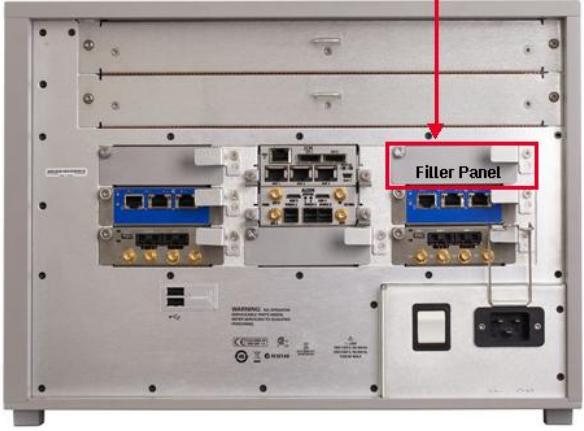
If you must return a Keysight product to Keysight Technologies, use the undamaged original or comparable shipping materials. See *Returning Components for Service* on page 16.

3 Tools required for Installation

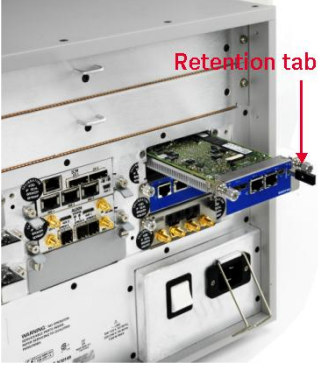
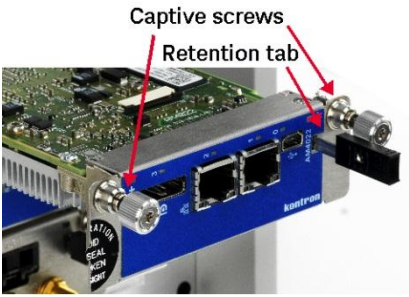
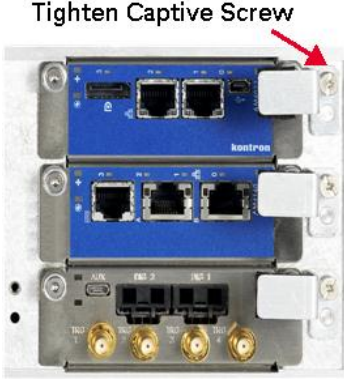
- Flat-head screw driver (to remove the filler panel)
- Torx T10 screwdriver (to install the Server PC).

4 Installation of the Internal Applications Server

IMPORTANT	<ul style="list-style-type: none"> - You must install E7515A software version 1.2.3.0 or above in order to use the Internal Applications Server. - Ensure you are working at a static safe workstation before performing the installation process described below. Review the section entitled, <i>ESD Information</i> on page 14, before beginning the installation process.
------------------	---

Step	Notes
<p>1. Make sure the instrument is turned off by switching the Mains switch on the rear-panel to Off. Also, ensure there are no Ethernet cables connected to the instrument.</p>	<p>Ensure Mains switch is in <i>Off</i> position.</p> 
<p>2. Remove filler panel from rear panel.</p>	<p>Remove filler panel.</p> 



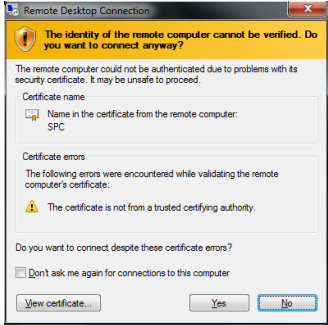
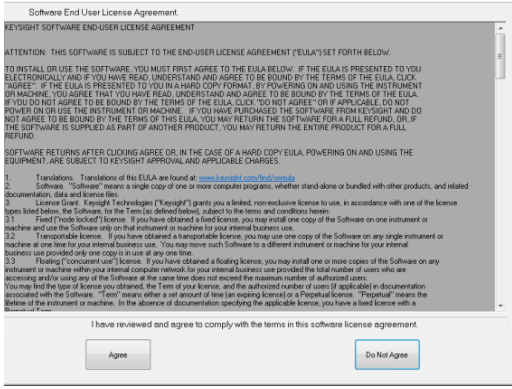
CAUTION	<p>Filler panel or Internal Applications Server must be in place whenever UXM is turned On to ensure proper air flow in instrument.</p>
----------------	---




Step	Notes
<p>3. Ensure the retention tab is unlocked (fully extended). Insert the Server PC in position shown.</p>	
<p>4. Insert and tighten captive screws to 4.7 lb-in (~53 N-cm). Lock retention tab. NOTE: View shows retention tab extended, not locked. Push tab in to lock.</p>	
<p>5. Attach retainer bracket in order to secure module in place.</p> <ul style="list-style-type: none"> • Tighten captive screw to 4.7 lb-in (~ 53 N-cm) 	
<p>6. This completes the physical installation of the Internal Applications Server. Continue to the next steps which enable its ability to function properly.</p>	

Accepting End-User License Agreements

It is necessary for you to accept both the Instrument and Administrator login End-User License Agreements (EULAs) in order for the Internal Applications Server to operate properly.

Keysight Internal Applications Server (E7515AU-S01)
Installation Guide

Step	Notes
1. Turn UXM power on by switching the Mains switch on the rear-panel to On	
2. Wait a few minutes for the UXM to detect the SPC. The UXM Control Panel icon displays the green UXM icon and the red SPC icon within it, as shown to the right. NOTE: An error is displayed stating the End-User License Agreement (EULA) has not yet been accepted in the Application Server PC.	
3. Select the remote desktop Server PC icon located on the UXM desktop. (If prompted, the password for the <i>Instrument</i> user is: measure4u.)	
4. Upon first connecting via remote desktop to the Internal Applications Server (either by Instrument or Administrator login), this pop-up message is displayed. Select Yes and mark the box "Don't ask me again for connections to this computer."	
5. The End-User License Agreement (EULA) is displayed. Carefully review the terms and select Agree if you accept them. Close the remote desktop connection using the 'X' at the top of the window.	
6. Select the remote desktop Server PC (Admin) icon located on the UXM desktop.	

Step	Notes
<p>(If prompted, the password for the <i>Administrator</i> user is: Keysight4u!)</p>	
<p>7. Repeat steps 4 and 5 above. Then return to next step.</p>	
<p>8. Reboot the Platform boards by selecting the Reboot icon in the UXM Control Panel</p> 	
<p>9. After the reboot is complete, the UXM Control Panel displays a green UXM icon and a green SPC icon. This green-on-green display indicates both the UXM and the SPC are ready to begin operation. Refer to the UXM Getting Started Guide for next steps and suggestions regarding which Application Software can be loaded on the Internal Applications Server.</p>	

ESD Information

Protection from Electrostatic Discharge

Electrostatic discharge (ESD) can damage or destroy electronic components. All work on electronic assemblies should be performed at a static-safe workstation.

Figure 4-1 on page 14 shows an example of a static-safe workstation using two types of ESD protection:

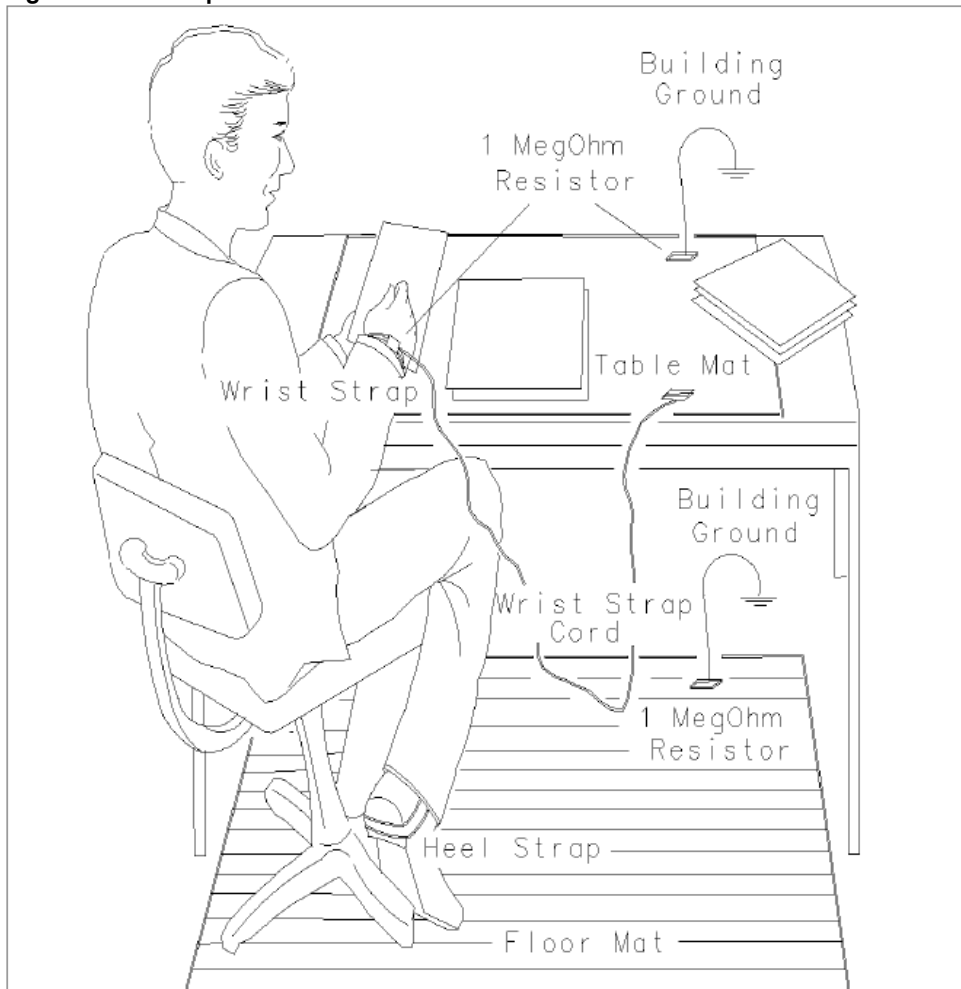
- Conductive table-mat and wrist-strap combination.
- Conductive floor-mat and heel-strap combination.

Both types, when used together, provide a significant level of ESD protection. Of the two, only the table-mat and wrist-strap combination provides adequate ESD protection when used alone. To ensure user safety, the static-safe accessories must provide at least 1 megohm of isolation from ground.

WARNING

These techniques for a static-safe workstation should not be used when working on circuitry with a voltage potential greater than 500 volts.

Figure 4-1: Example of a Static-Safe Workstation



Handling of Electronic Components and ESD

The possibility of unseen damage caused by ESD is present whenever components are transported, stored, or used. The risk of ESD damage can be greatly reduced by paying close attention to how all components are handled.

- Perform work on all components at a static-safe workstation.
- Keep static-generating materials at least one meter away from all components.
- Store or transport components in static-shielding containers.

CAUTION

Always handle printed circuit board assemblies by the edges. This reduces the possibility of ESD damage to components and prevents contamination of exposed plating.

Test Equipment Usage and ESD

- Before connecting any coaxial cable to an instrument connector, momentarily short the center and outer conductors of the cable together.
- Personnel should be grounded with a 1 megohm resistor-isolated wrist-strap before touching the center pin of any connector and before removing any assembly from the instrument.
- Be sure that all instruments are properly earth-grounded to prevent build-up of static charge.

For Additional Information about ESD

For more information about preventing ESD damage, contact the Electrical Over Stress/Electrostatic Discharge (EOS/ESD) Association, Inc. (<http://www.esda.org>). The ESD standards developed by this agency are sanctioned by the American National Standards Institute (ANSI).

5 Troubleshooting

WARNING

No operator serviceable parts inside. Refer servicing to qualified personnel. To prevent electrical shock do not remove covers. The only cover that can be removed is the plate covering the SPC slot.

Returning Components for Service

Calling Keysight Technologies

Keysight Technologies has offices around the world to provide you with complete support for your wireless test set. To obtain servicing information or to order replacement parts, contact the nearest Keysight Technologies office listed below. In any correspondence or telephone conversations, refer to the part number and serial number of the Internal Applications Server. For the Internal Applications Server referenced in this document, the following information is provided on the serial number label attached to its faceplate:

- Part number: E7515-60705
- Serial Number: The serial number will be in the format: AB12345678.
- Refer to [page iii](#) of this document for the software revision number to which this part is applicable.

Locations for Keysight Technologies

Online assistance: <http://www.keysight.com/find/assist>

If you do not have access to the Internet, one of these centers can direct you to your nearest representative:

Should the Declaration of Conformity be required, please contact a Keysight Sales Representative, or the closest Keysight Sales Office. Alternately, contact Keysight at: www.keysight.com.

Service and Support

Americas

Brazil
55 11 3351 7010
United States
(800) 829 4444

Canada
(877) 894 4414

Mexico
001 800 254 2440

Asia Pacific

Australia
1 800 629 485
China
800 810 0189
Hong Kong
800 938 693
Other Asian Countries:
(65) 6375 8100

India
1 800 112 929
Japan
0120 (421) 345
Korea
080 769 0800

Malaysia
1 800 888 848
Singapore
1 800 375 8100
Taiwan
0800 047 866

www.keysight.com/find/contactus

Europe & Middle East

Austria
0800 00 11 22
Belgium
0800 58 580
Finland
0800 523 252
France
0805 980 333
*0.125 €/minute
Germany
0800 6270 999

Ireland
1800 832 700
Israel
1 809 343 051
Italy
800 599 100
Luxembourg
+32 800 58580
Netherlands
0800 0233 200

Russia
8800 5009 286
Spain
0800 00 01 54
Sweden
0200 88 22 55
Switzerland
0800 80 53 53
United Kingdom
0800 0260 637

Other Unlisted Countries:

www.keysight.com/find/contactus



This information is subject to change
without notice.
© Keysight Technologies, Inc. 2015
Published in USA, February 20th, 2015
E7515-90013