

SKF Multilog On-line System IMx-16W-K



Installation Manual
Part Number **15V-090-00140-100**
Revision **A – May 2024**



Read this manual carefully before using the product. Failure to follow the instructions and safety precautions in this manual can result in serious injury, damage to the product or incorrect readings. Keep this manual in a safe location for future reference.

Copyright © 2024 by SKF Group
All rights reserved.

SKF Sverige AB
Ålgatan 10D, 973 34 Luleå, Sweden
Telephone: +46 (0) 31 337 10 00



® SKF is a registered trademark of the SKF Group.

ICP® with associated logo is a registered trademark of PCB Piezotronics, Inc. in the United States and ICP® is a registered trademark of PCB Piezotronics Europe GmbH in Germany and other countries.

All other trademarks are the property of their respective owners.

The contents of this publication are the copyright of the publisher and may not be reproduced (even extracts) unless prior written permission is granted. Every care has been taken to ensure the accuracy of the information contained in this publication, but no liability can be accepted for any loss or damage whether direct, indirect or consequential arising out of the use of the information contained herein. SKF reserves the right to alter any part of this publication without prior notice.

Product Registration

Please take a moment to [register](#) your product to receive exclusive benefits offered only to our registered customers, including technical support, tracking your proof of ownership and staying informed about upgrades and special offers. (Please visit our website for more details on these benefits.)

General Product Information

General information such as datasheets and catalogues are published on the [Condition Monitoring Systems](#) site on SKF.com. Supporting product information can also be downloaded from the [SKF Technical Support](#) self-service web portal.

Product Support Contact Information

Repair and Calibration Services – Submit a [Return Authorization \(RA\) request](#) to arrange for repair or calibration of your product. You will receive an RA number and shipping instructions usually within 48 business hours.

Product Sales – For information on purchasing condition monitoring products, services and support on products out of warranty, please contact your [local SKF sales office](#) or [distributor](#).

How to request Technical Support – Please open a support case using the Technical Support group's self-help portal at www.skf.com/cm/tsg. Once your support case is submitted, a technician will contact you to begin working on your issue. For urgent issues we are available at these times:

- Monday through Friday, 5:00 a.m. to 4:00 p.m. Pacific Time
Phone: +1 800 523 7514 within the US or +1 858 496 3627 outside the US.
- Monday through Friday, 8:00 a.m. to 4:00 p.m. Central European Time
Phone: +46 31 337 65 00.
- Monday through Friday, 7:30 a.m. to 4.30 p.m. India Standard Time
Phone: +60 16 699 9506.

Table of contents

1	Safety messages	4
1.1	Personnel safety	4
1.2	Energized equipment.....	5
1.3	Hazardous locations	5
1.4	No submersion / immersion	5
1.5	Avoid damage and injury	5
2	Product description	6
2.1	Introduction	6
2.2	System boundary.....	6
2.3	Components.....	7
3	Upgrade procedure	9
3.1	Remove existing IMx-W/Mascon 16W electronics	9
3.2	Install the IMx-16W-K electronics	10
3.3	Configuration update in SKF @ptidute Observer.....	12
4	Electrical waste	15

1 Safety messages



Warning! *Your safety is extremely important! Read and follow all warnings in this document before handling and operating the equipment. You can be seriously injured, and equipment and data can be damaged if you do not follow the safety warnings.*



Warning! *Warning messages can alert you to an operating procedure, practice, condition, or statement that must be strictly observed to prevent equipment damage or destruction, or corruption or loss of data.*



Important! *Important messages means that there is a risk of product or property damage if the instruction is not heeded.*

1.1 Personnel safety

- Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing, and gloves away from moving parts.
- Do not overreach. Always keep proper footing and balance to enable better control of the device during unexpected situations.
- Use safety equipment. Always wear eye protection. Non-slip safety shoes, hard hat and hearing protection must be used in the appropriate settings.
- Do not repair or adjust energized equipment alone, under any circumstances. Someone capable of providing first aid must always be present for your safety.
- Persons working on or near high-voltage equipment should be familiar with approved industrial first-aid methods.
- Never open or work on energised electrical systems unless authorised by a responsible authority. Energized electrical systems are dangerous and electric shocks from energized systems can be fatal. Always ensure that the necessary permission or permit to work has been obtained before commencing any work.
- Always obtain first aid or medical attention immediately after sustaining an injury. Never neglect an injury, no matter how superficial it initially seems.

SAFETY MESSAGES

Energized equipment



1.2 Energized equipment

Never work on energized equipment unless authorized by a responsible authority. Energized electrical equipment is dangerous. Electrical shock from energized equipment can cause death. If you must perform authorized emergency work on energized equipment, be sure that you comply strictly with approved safety regulations.

1.3 Hazardous locations

Hazardous instructions are included with this device and must be followed in accordance with the safety instructions provided with device.

1.4 No submersion / immersion

This equipment has been designed to be splash and dust resistant. However, avoid direct contact with water, wet surfaces, or condensing humidity. If the instrument is subjected to these conditions, adverse operation may result, and there is a risk of serious injury or damage should electrical shock or fire occurs. Allow the instrument to dry thoroughly before operation. Do not open the battery compartment in locations where contact with water or other contaminants may occur.

1.5 Avoid damage and injury

To avoid costly damage to the instrument or injury from a falling instrument, place the device on a solid stable surface when not in use and do not place any heavy objects on it.

Use a damp, clean cloth for cleaning. Do not use cleaning fluids, abrasives, or aerosols. They could cause damage, fire, or electrical shock.

2 Product description

2.1 Introduction

This document describes the **SKF Multilog On-line System IMx-16W-K**, detailing the step-by-step procedure for replacing the current electronics of either the **IMx-W** or **MasCon16W** with the **IMx-16W-K**.

2.2 System boundary

The **SKF Multilog On-line System IMx-16W-K** consists of the following main parts:

- IMx-16 unit, including the DAK package
- Power supply unit (PSU)
- I/O board

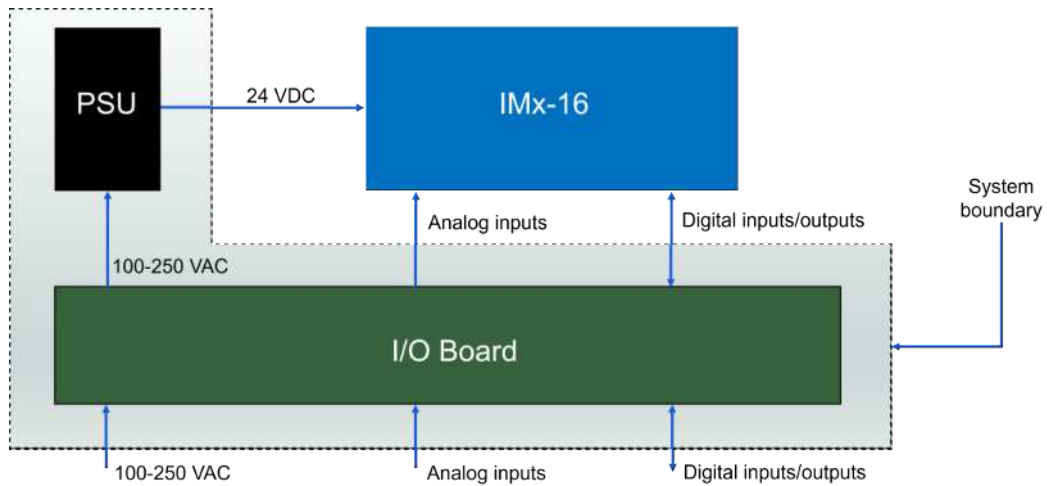


Figure 1 System boundary

2.3 Components

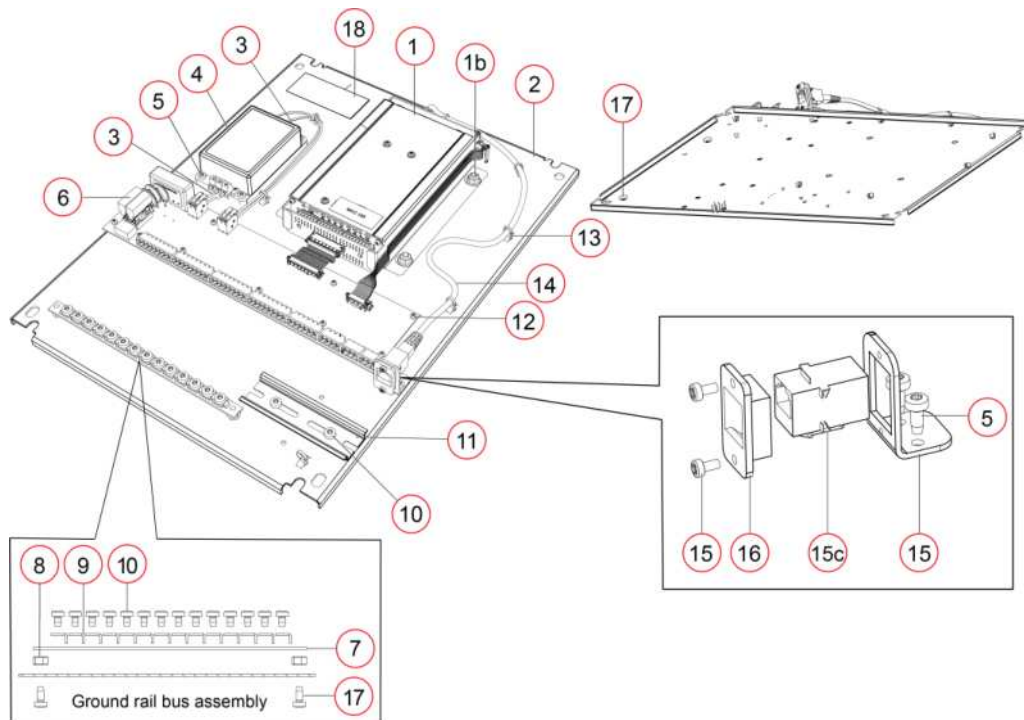


Figure 2 SKF Multilog On-line System IMx-16W-K Components

Part	Qty	Description
1	1	CMON 4216 DAK
2	1	IMx-W Mounting plate assembly
3	1	IMx-W Power cable
4	1	AC-DC transformer 24VDC, 40W TRACO TML
5	6	Screw M4×10 Torx, zinc plated
6	1	PCBA, IMx-W Connector board
7	1	Ground rail bus bar perforated galvanic steel 12×214mm
8	2	NEX nut M6 DIN 934, zinc coated
9	14	Cable pressure piece
10	16	Screw M5×8 Torx, zinc plated
11	1	Din rail 35×108mm
12	10	MRX screw M3×10
13	7	Fixing tie for hole (round), Ø1.5–22.0mm, black
14	1	ETH Cable TP-5 0.5m straight
15	1	Keystone mounting bracket

Part	Qty	Description
16	2	Cat6A RJ45 Shielded Panel Mount Coupler
17	1	M5×12 screw, Torx
18	1	Product label

Note: Cabinet enclosure is not included in the SKF Multilog On-line System IMx-16-W-K upgrade kit.



Figure 3 Example of a mounted SKF Multilog On-line System IMx-16W-K

UPGRADE PROCEDURE

Remove existing IMx-W/Mascon 16W electronics



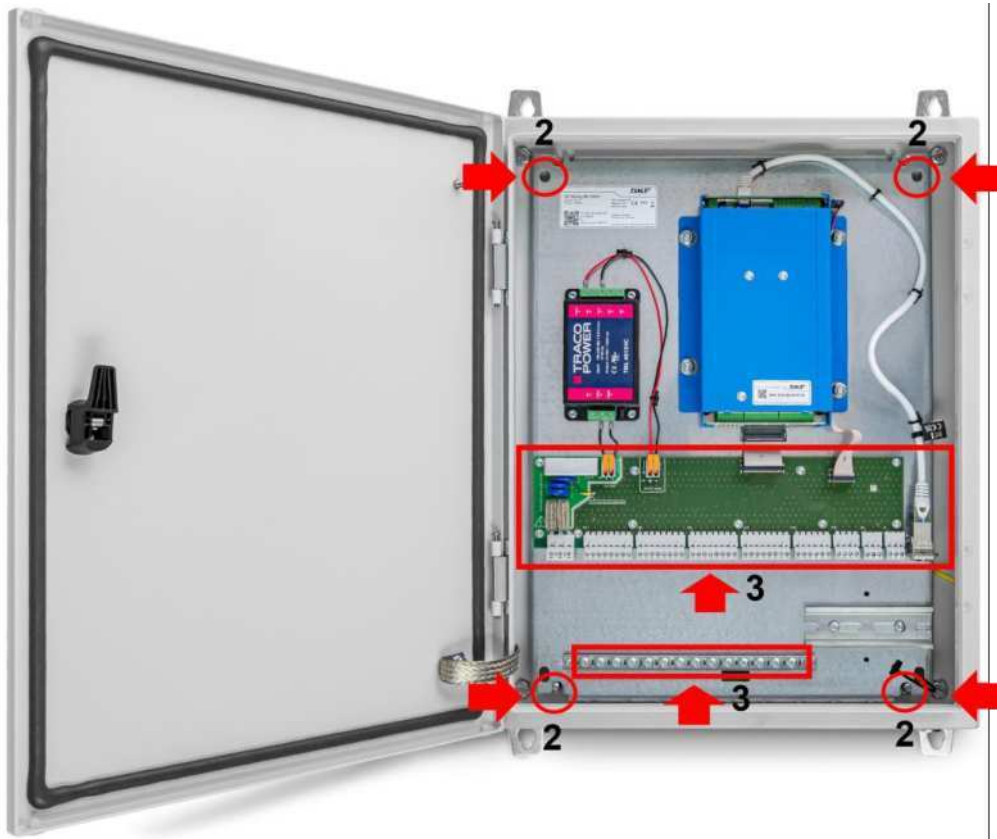
3 Upgrade procedure

3.1 Remove existing IMx-W/Mascon 16W electronics





1. Disconnect the electrical connections.
2. Unscrew the four screws located in every corner of the cabinet (2).
3. Remove the complete backplate from the cabinet.

3.2 Install the IMx-16W-K electronics







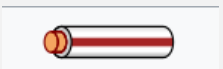

1. Locate the IMx-16W-K backplate in the cabinet.
2. Screw the four nuts in place in every corner of the cabinet.
3. Connect the electrical connections and grounding.

To replace the MasCon16W unit, you'll need to establish the ethernet connection using a screw terminal. To convert to the RJ45 connector provided in the kit, refer to the following pinout:

T568B color	10BASE-T/100BASE-TX signal
 White/Orange stripe	TD+
 Orange solid	TD-

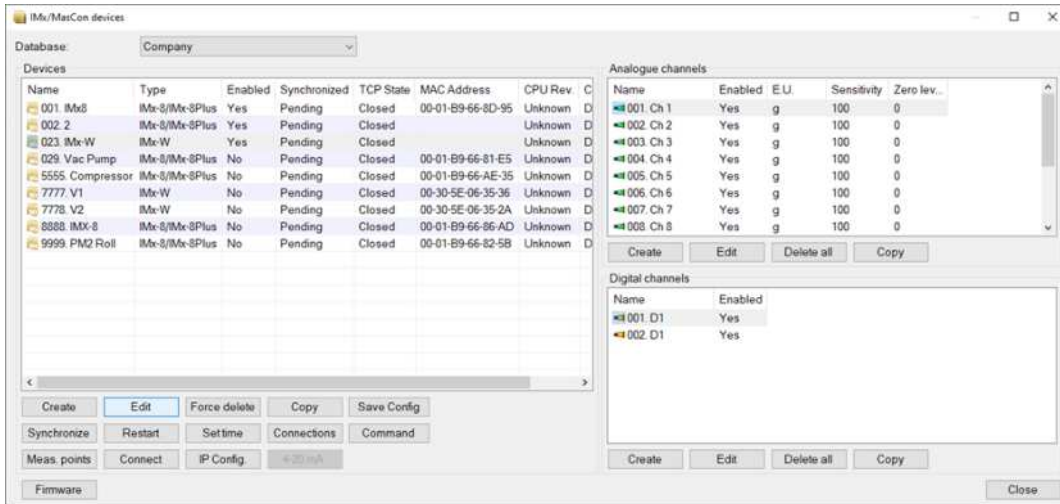
UPGRADE PROCEDURE
Install the IMx-16W-K electronics



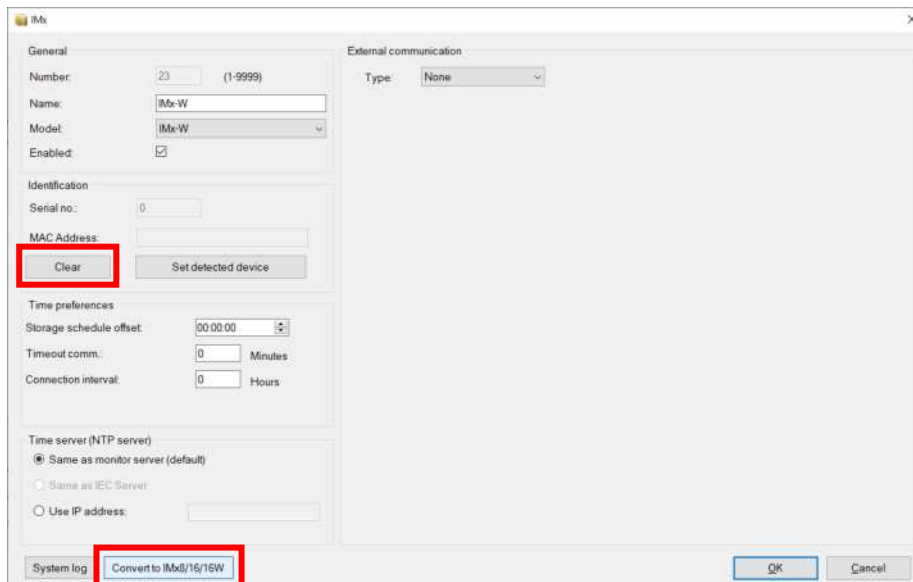
T568B color	10BASE-T/100BASE-TX signal
 White/Green stripe	RD+
 Blue solid	Not used
 White/Blue stripe	Not used
 Green solid	RD-
 White/Brown stripe	Not used
 Brown solid	Not used

3.3 Configuration update in SKF @ptidute Observer

1. In the @ptidute Observer, from the toolbar, select **On-line -> IMx/MasCon devices**.



2. Select the device you want to update and click **Edit**.
3. Click **Clear** to remove the MAC address.



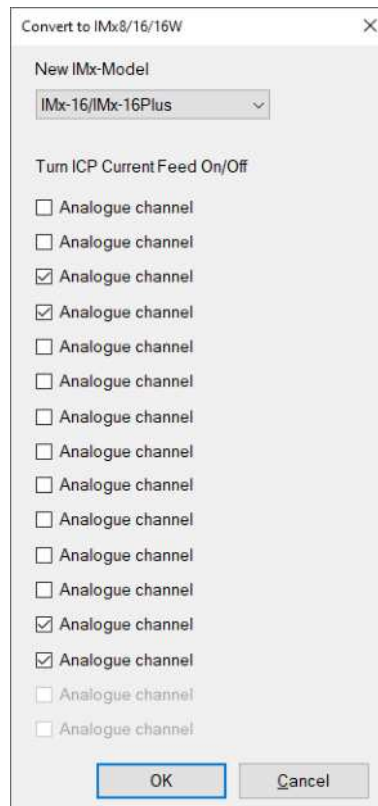
4. Click **Convert to IMx8/16/16W**.

UPGRADE PROCEDURE

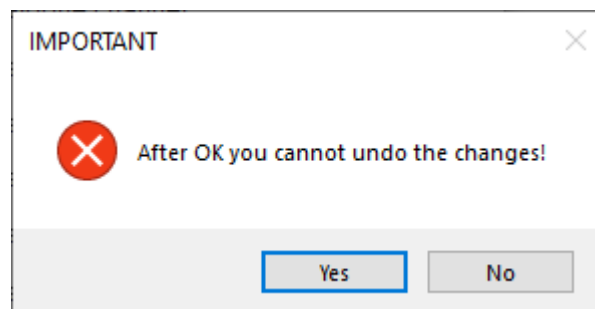
Configuration update in SKF @ptitude Observer



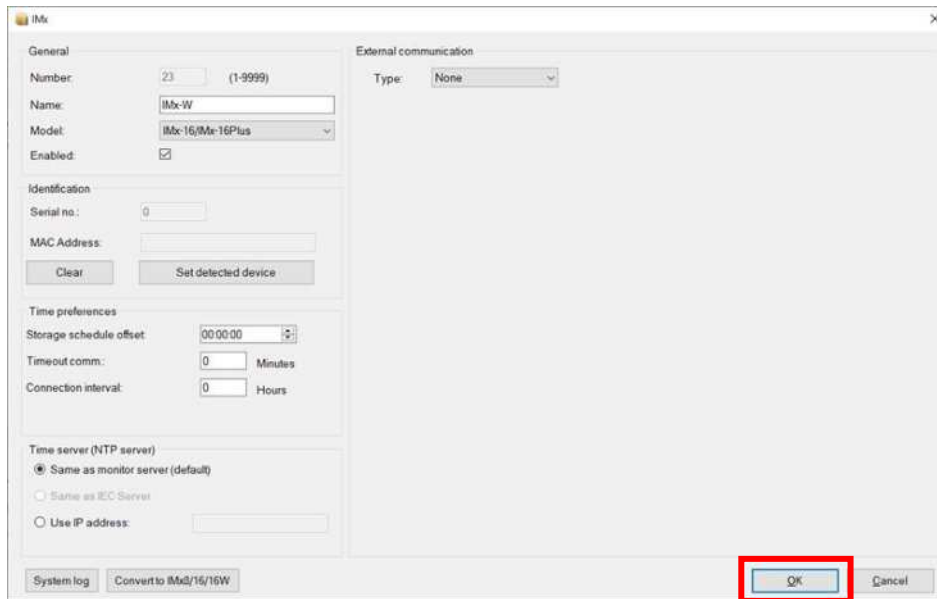
- From the **IMx-Model** dropdown, select **IMx-16/16Plus**.



- A pop-up window will prompt you that you cannot undo the changes. Click **Yes** to continue.



- Click **OK** to complete the update.



8. The update is now completed and visible in the **IMx/MasCon devices** view.

Name	Type	Enabled	Synchronized	TCP State	MAC Address	CPU R
001. IMx8	IMx-8/IMx-8Plus	Yes	Pending	Closed	00-01-B9-66-8D-95	Unknov
002. 2	IMx-8/IMx-8Plus	Yes	Pending	Closed		Unknov
023. IMx-W	IMx-16/IMx-16Plus	Yes	Pending	Closed		Unknov
029. Vac Pump	IMx-8/IMx-8Plus	No	Pending	Closed	00-01-B9-66-81-E5	Unknov
5555. Compressor	IMx-8/IMx-8Plus	No	Pending	Closed	00-01-B9-66-AE-35	Unknov
7777. V1	IMx-W	No	Pending	Closed	00-30-5E-06-35-36	Unknov
7778. V2	IMx-W	No	Pending	Closed	00-30-5E-06-35-2A	Unknov
8888. IMX-8	IMx-8/IMx-8Plus	No	Pending	Closed	00-01-B9-66-86-AD	Unknov
9999. PM2 Roll	IMx-8/IMx-8Plus	No	Pending	Closed	00-01-B9-66-82-5B	Unknov

When you have completed the upgrade procedure, ensure that:

- IMx-16W-K starts up
- Performs pre-defined measurements
- Connects to SKF @ptitude Observer

4 Electrical waste



Electrical waste and electrical equipment should be recycled as specified by the WEEE-directive and not be placed in the general refuse. Product should be sent to an approved recycling centre for safe recycling, recovery, reuse or returned to SKF for proper recycling.

SKF Sverige AB
Ålgatan 10D
973 34 Luleå
Sweden