

TEN-FMD1 - Customer Drop Enclosure Installation Guide

Rev. 1.00/04.2025



Contents

Getting Started
Introduction
Package Contents1
About the TEN-FMD1 Customer Drop Enclosure2
About the TEN-FMD1 Customer Drop Enclosure
Ordering Information 2
Mechanical Layout
nstallation Instructions4
General Preparations and Precautions4
Installation Guidelines4
and Declarations

Getting Started



TEN-FMD1 - Customer Drop Enclosure

Introduction

The TEN-FMD1 is an IP68-rated customer drop enclosure designed to support up to 24 customer connection adapters and accommodate up to 144 splices, with 36 splices per 4 cassettes. It is suitable for a variety of installation environments, including underground, aerial, pole, and wall mounting applications. This guide will walk you through all the steps for a successful installation.

Package Contents

Kindly unpack the TEN-FMD1 and confirm that all items are present, as illustrated in Figure 1. Should any items be missing, please promptly contact your local seller for assistance.



Figure 1 - Package contents

- TEN-FMD1 enclosure
- Cassette
- Adapter tray
- Adapter module/holder
- Cable fixings
- Grommet 1x12 mm
- Splice tray
- PLC splitter holder
- Splice inserts
- Grommet 2x4 mm

About the TEN-FMD1 Customer Drop Enclosure

The TEN-FMD1 Customer Drop Enclosure is easy to install and operate, featuring a unique IP68 design for superior protection against dust and water, ensuring reliable performance in harsh environments

- 8/16/24 LC Customer Drop Node design
- Up to 4 splice/splitter trays
- 36 splices per tray
- Cable entry diameters 2-12 mm
- Up to 24 cable entry ports

Product Specification - General

Dimension (LxWxH)	248 x 175 x 75mm	IP rating	IP68
Capacity	144 splices	Splice trays	1 x Adapter tray + 2 x Splice trays or 4 x splice trays
Cable ports	Up to a total of 24 ports in multiple configurations	Cable diameters	2 - 12 mm
Material	Thermoplastic	Operating temperature	-40 ° to + 70 °C
Net weight	650 grams (excluding grommets)		

Ordering Information

TEN-FMD1-base	Customer Drop Enclosure, incl. Base, Lid, Internal cassette and Cable fixings.		
Accessories:			
TEN-FMD1-tray1	Adapter tray		
TEN-FMD1-tray2	Splice tray		
TEN-FMD1-splice14	Splice insert, 14 splices		
TEN-FMD1-splice36	Splice insert, 36 splices		
TEN-FMD1-PLCholder	PLC splitter holder		
TEN-FMD1-grommet2x4	Plug in grommet for 2 x 4mm cable		
TEN-FMD1-grommet1x12	Plug in grommet for 1 x 12mm cable		
TEN-FMD1-ADholder1x4	Adapter holder bracket for adapter tray with 4 SC/LC duplex adapter positions		

Mechanical Layout

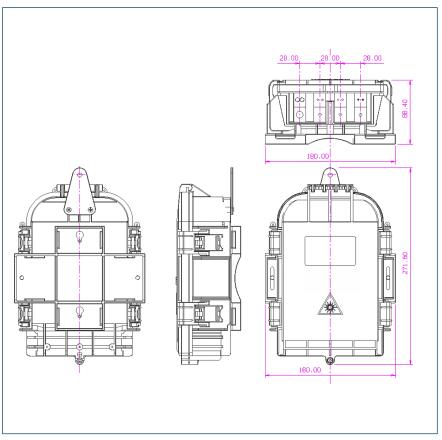


Figure 3 - Mechanical layout

Installation Instructions



Warning! Ensure to follow basic safety precautions to reduce risk of fire, electrical shock, and personal injury.

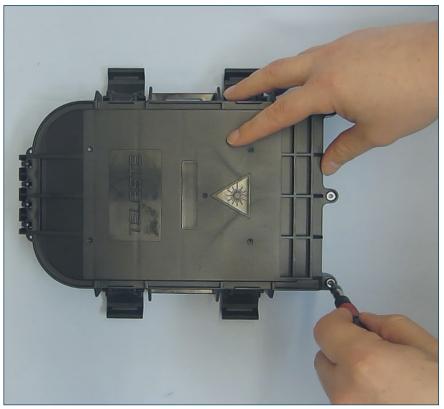
Thank you for choosing this Teleste product. Please take a moment and carefully read these instructions through before installing the product.

General Preparations and Precautions

- 1. Check the Customer Drop Enclosure, cable items and all other components for any damages before installation.
- 2. Make sure to keep all components dry and clean for the installation.
- 3. Keep the working environment clean (dry and no dust) and flat for the installation.
- 4. Standard instruments and tools should be used during the installation.

Installation Guidelines

1. Start by loosening the three lid fasteners, then remove the lid.

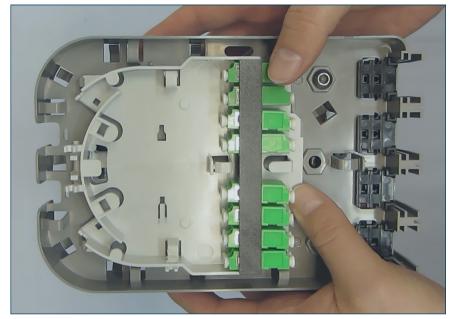


Picture 1



All necessary safety instructions must be followed during the installation and maintenance operations. The safety requirements for class 1M lasers are detailed in EN60825-1.

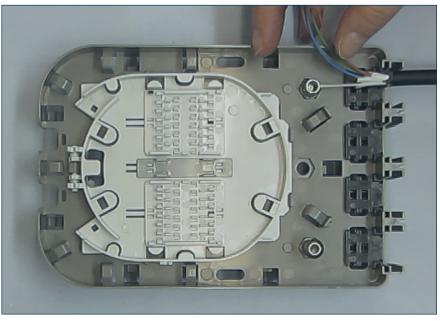
2. Remove the tray cassette and Install a tray with an adapter module onto the cassette.



Picture 2

Now it's time to prepare the preferred installation setup, including the incoming and outgoing cables, or a mid-span/loop-through configuration.

3. Begin preparing for the incoming cable. Loosen the strain relief terminal screw and secure the cable's strength member in the terminal and tighten the screw.

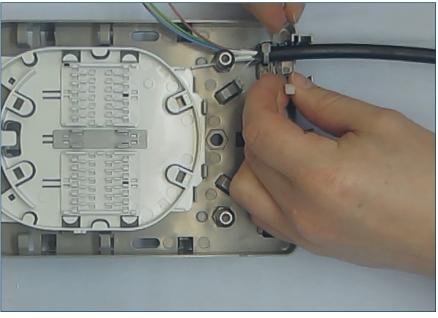


Picture 3

4. Secure the incoming cable with two cable ties to prevent movement and strain.



Note! Properly securing the cable is crucial to maintaining the integrity of the optical fibers. Movement and stress on the fibers can lead to physical damage, such as microbends or fractures, disrupting the transmission of light. This can cause poor network performance.

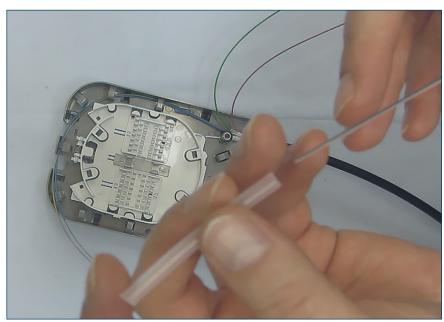


Picture 4

5. Then, carefully strip the fiber cable according to the manufacturer's instructions to ensure proper handling and optimal performance.



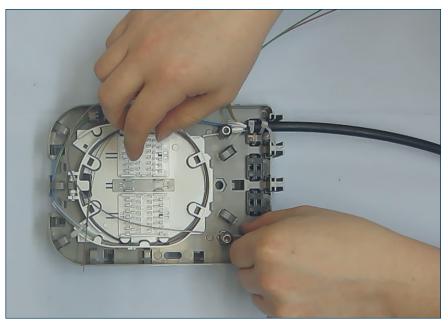
Note! Optical fibers should not be damaged. Cut the damaged fiber, and re-strip the fiber if any damage occurs.



Picture 5

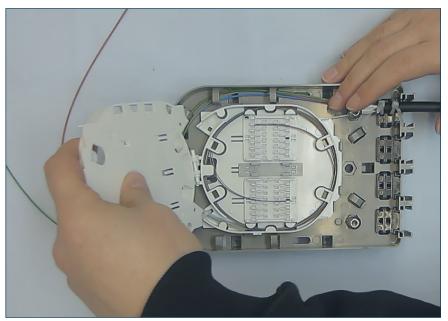
6. Prepare protective plastic tubes and route the stripped fibers through them, then place them at the entrance of the tray.

7. Secure the tube with a cable tie. Continue routing the incoming fibers around the fiber guides, adjusting the length as needed.



Picture 6

8. Next, install the second tray. Continue handling the remaining fiber tubes in the same manner.

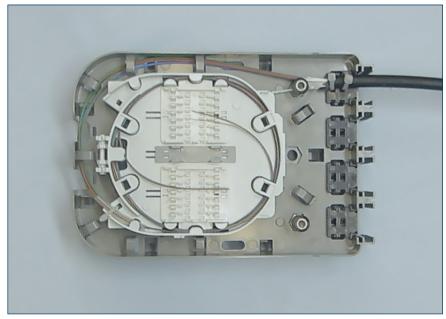


Picture 7



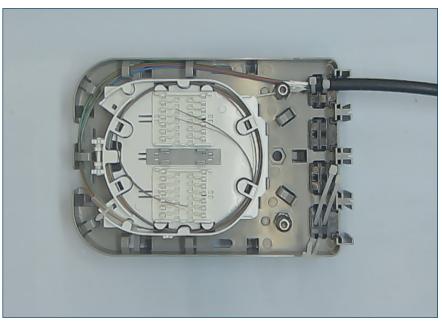
Note! Always clean optical adapters and connector end faces as part of the enclosure installation; this is crucial for maintaining optimal network performance. Be sure to follow proper cleaning techniques and inspect connectors and adapters before installation.

9. Preparation of the incoming cable is now complete.



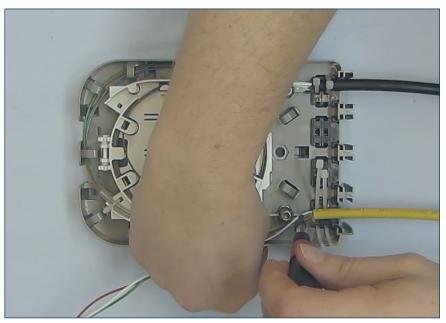
Picture 8

10. Next, it's time to prepare for the outgoing cable. Prepare two cable ties to secure it.



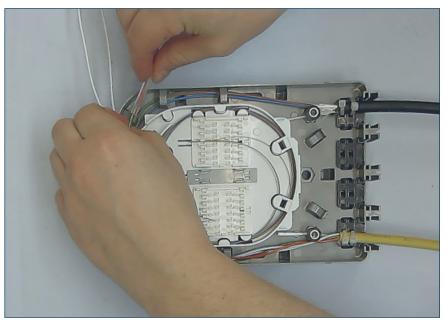
Picture 9

11. Insert the cable, anchor the cable's strength member, and tighten the screw.



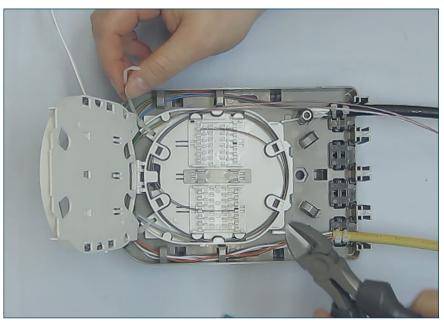
Picture 10

12. Strip the fiber cable according to the manufacturer's instructions, then prepare protective plastic tubes, place and secure at tray entrance



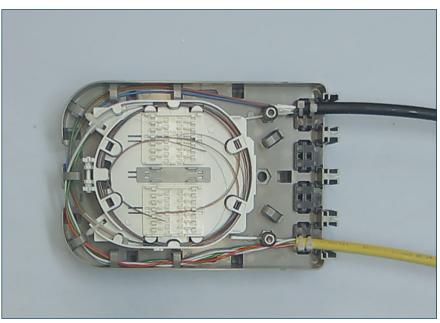
Picture 11

13. The assembly is secured and placed at tray entrance.



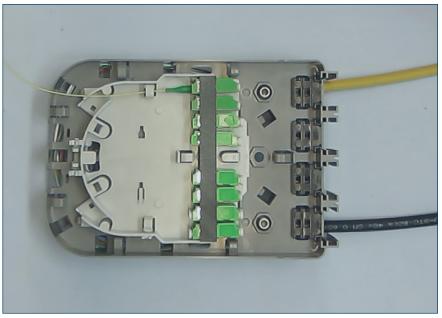
Picture 12

14. Continue handling the remaining fiber tubes in the same manner



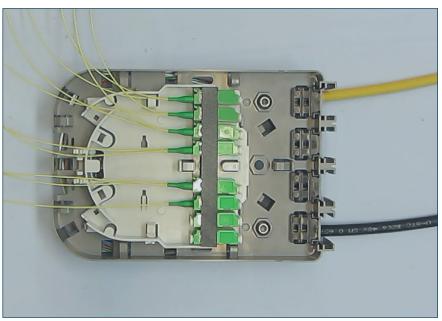
Picture 13

15. Make sure the cassette has been turned over. Start installing pigtails into the adapter module, ensuring that each connector end face has been properly cleaned.



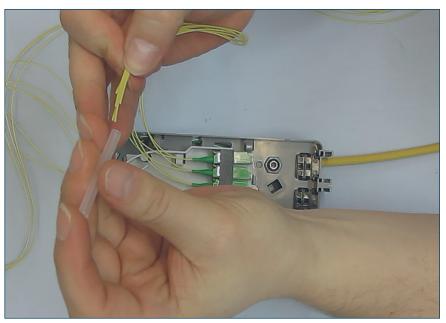
Picture 14

16. Continue installing pigtails.



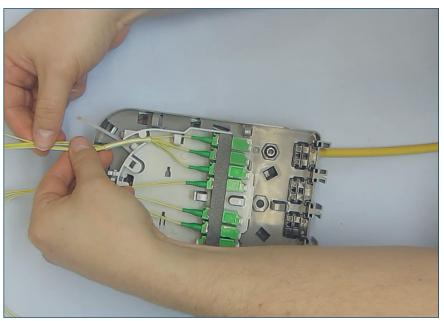
Picture 15

17. Prepare plastic tubes and carefully organize the pigtails



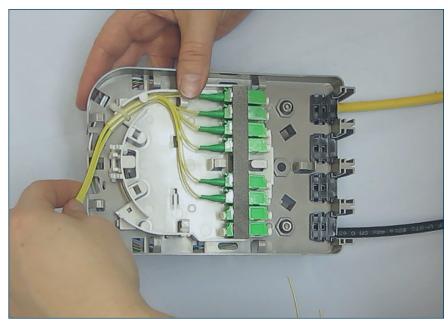
Picture 16

18. Place the assembly at the tray entrance and secure it with a tie.



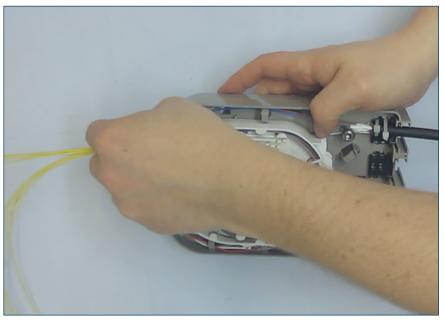
Picture 17

19. Carefully organize the pigtails and route the assembly toward the edge of the cassette.



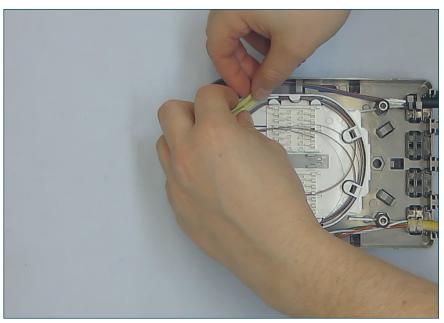
Picture 18

20. Turn the cassette over.



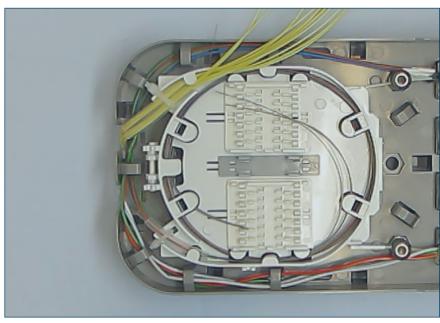
Picture 19

21. After turning the cassette over, arrange the assembly at the tray entrance.



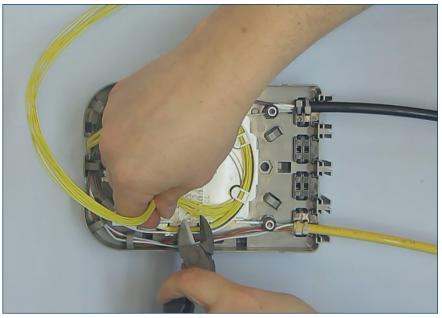
Picture 20

22. Then, gently secure it with a cable tie.



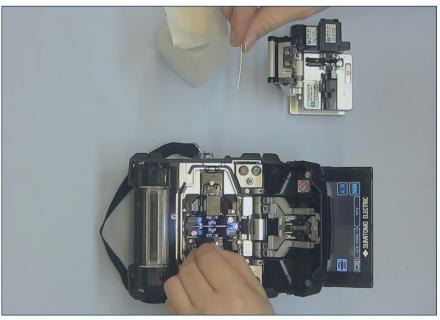
Picture 21

23. Continue organizing the pigtails around the guides and adjust the length as needed.



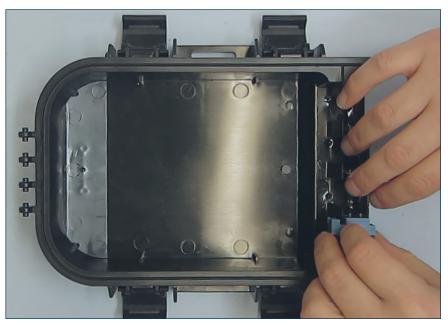
Picture 22

24. Next, prepare for splicing. Proceed with splicing the appropriate fibers for your project.



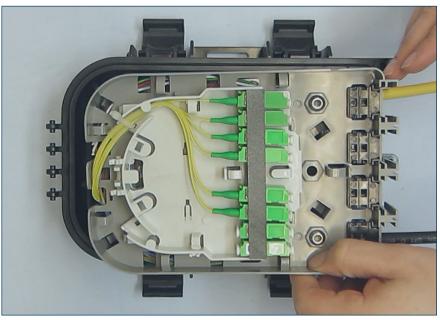
Picture 23

25. Next, it's time to reassemble the TEN-FMD1 and finish the installation.



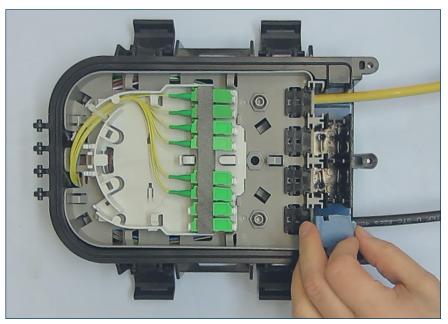
Picture 24

26. Insert the cassette into the enclosure, ensuring the adapter module is facing upwards.



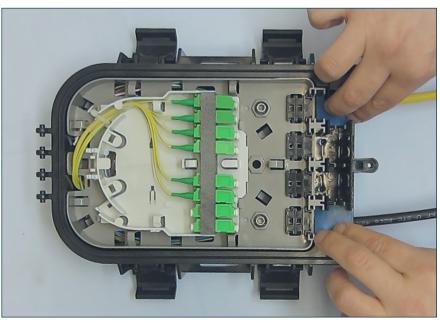
Picture 25

27. Fit the other half of the grommet into its designated track.



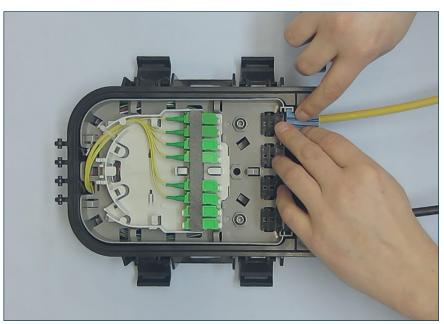
Picture 26

28. Continue fitting the grommet for the outgoing cable.



Picture 27

29. Proceed by installing the grommet(s) designed to support customer drop cables.

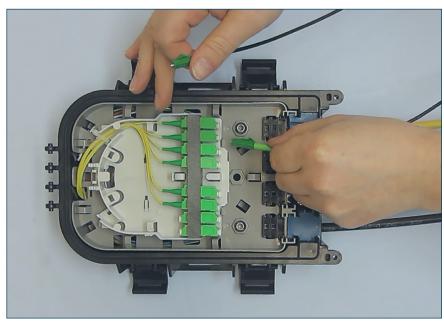


Picture 28

30. Then, connect the drop cables.

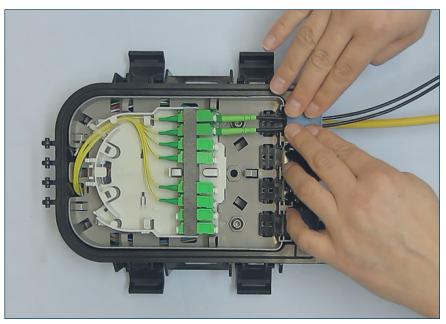


Warning! Never look directly into the end of a fiber or a fiber connector that may be carrying laser light. Laser light, visible or invisible, can seriously injure eyes or even cause blindness.



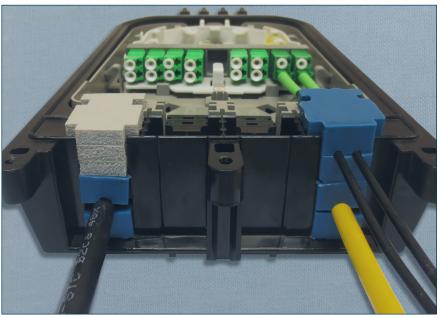
Picture 29

31. Fit the second half of the drop cable grommet.



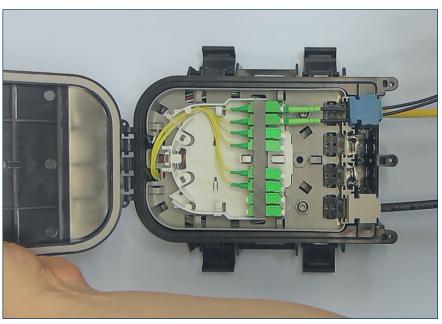
Picture 30

32. Installation of grommets and cables is now complete



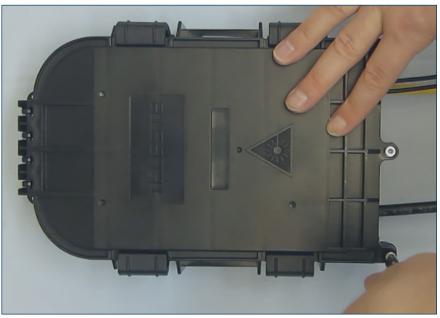
Picture 31

33. Put the lid back on



Picture 32

34. Close the latches and finish by tightening the lid fasteners.



Picture 33



Picture 34

35. This finishes the installation – good work!

Legal Declarations

Copyright © 2025 Teleste Corporation. All rights reserved.

TELESTE is a registered trademark of Teleste Corporation. Other product and service marks are property of their respective owners.

This document is protected by copyright laws. Unauthorized distribution or reproduction of this document is strictly prohibited.

Teleste reserves the right to make changes to any of the products described in this document without notice and all specifications are subject to change without notice. Current product specifications are stated in the latest versions of detailed product specifications.

To the maximum extent permitted by applicable law, under no circumstances shall Teleste be responsible for any loss of data or income or any special, incidental, consequential or indirect damages howsoever caused.

The contents of this document are provided "as is". Except as required by applicable law, no warranties of any kind, either express or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose, are made in relation to the accuracy, reliability or contents of this document.

Teleste reserves the right to revise this document or withdraw it at any time without notice.





enlighten **FTTx SOLUTIONS**



TELESTE CORPORATION

P.O.Box 323 FI-20101 Turku, Finland www.teleste.com

Copyright © 2025 Teleste Corporation. All rights reserved. Teleste and the Teleste logo are registered trademarks of Teleste Corporation.

Other product and service marks are property of their respective owners.

Teleste reserves the right to make changes to any features and specifications of the products without prior notice. Although the information in this document has been reproduced in good faith, the contents of this document are provided "as is". Teleste makes no warranties of any kind in relation to the accuracy, reliability or contents of this document, except as required by applicable law.