

IoTPASS User Manual

Overview

This document describes the installation, commissioning and verification procedure for the IoTPASS device as used on an intermodal dry container.

IoTPASS

The IoTPASS is a multi-purpose monitoring and security device. Once installed, the location and movements of the host equipment will be transmitted from the device to Net Feasa's IoT Device Management Platform – EvenKeel™.

For standard intermodal dry containers, IoTPASS is fitted into the corrugated grooves of the container and clamped onto the locking rod. In addition to location and movement data, any open/close door events, and container fire alarms, are transmitted from the device to Net Feasa's IoT Device Management Platform – EvenKeel™.

The IoTPASS is powered by a rechargeable battery within the enclosure, which is charged using the solar panels on the front face.



Equipment Included

Each IoTPASS is supplied with a pack containing the following:

IoTPASS with backplate
8mm Nut Driver
1 x Tek screws
3.5 mm HSS drill bit (for pilot hole)

Tools Required

Battery drill or impact driver
Cloth & water – To clean surface of container if necessary

A. Preparation for Installation

Step 1: Prepare the Device

Remove the IoTPASS from its packaging.

If the corrugation is of the shallower container specification, remove the back spacer from the device.

Note: Device is in ‘Shelf Mode’. The device will not report until it has been taken out of shelf mode. To take the device out of shelf mode, remove the 4 pins on the clamp. Rotate the clamp 90° clockwise. Hold for 30 seconds and then return it to its original position. **Ensure to put the 4 pins back in place after waking the device from shelf mode.**

Step 2: Position the Device

Position the device: The device should be installed within the top corrugation of the right container door, with the clamp fitted onto the inside locking rod.

Inspect the mounting area: Inspect the surface whereupon the IoTPASS is to be installed. Ensure that there are no major deformations such as dents on the container face.

With a damp cloth, clean the surface upon which the device shall be mounted. Ensure that there is no residue, foreign objects or any other items that may influence the securing of the device.

Step 3: Prepare the installation equipment

Cordless Drill, HSS drill-bit, Tek screw and 8mm nut driver

B. Installation

Step 1: Align the IoTPASS to container face

On the top corrugation, make sure that the back of the IoTPASS is aligned with the inside of the corrugation, then snap the IoTPASS onto the locking rod.

Step 2: Drill into container face

Spin the IoTPASS device into the corrugation of the container. Once the IoTPASS device is in place it can be secured by drilling a pilot hole. Drill directly into the container, ensuring that you are not drilling at an angle. Drill through the container so that there is a hole in the container door.

Step 4: Secure the Device

Fit the supplied 8 mm hex socket head securely into the drill. Install the Tek screw, ensuring that the enclosure is secured well onto the surface of the container, while also ensuring that there is no major damage caused by the screw on the plastic enclosure.

Note: It is very important to remove the 4 pins from the clamp once the device has been secured to the container. If these pins are not removed the device will not be able to detect door events.

SNAP the IoT*P*ASS onto the locking rod



SPIN into the door corrugation



SECURE by drilling into place



C. Commissioning and Verification

Step 1: Commissioning

Using a smartphone, take a picture of the IoT*P*ASS device serial number (on the right-hand side), and a picture of the container showing the container ID, then send an email to support@netfeasa.com. This process is needed so the Net Feasa support team can associate the device with the container and have that image for anyone who logs in to the visualization platform.

Step 2: Verification

Login to the visualization platform with your username and password. If you are unsure, please email support@netfeasa.com or login to the Net Feasa support portal.

Packaging, Handling, Storage and Transportation

Storage

Store in an area where there are no other specific storage hazards. Ensure that the storage area is cool, dry, and well ventilated.

The IoT^PASS is packaged in a cardboard box, as seen in the image below. A cardboard box is supplied, with 1x IoT^PASS device and supporting installation kit per box. It is wrapped in a Bulbbwrap sleeve. Each IoT^PASS is separated by a Styrofoam cushion, to prevent damage. Do not ship any IoT^PASS device in any packaging other than the original packaging. Shipping in another type of packaging can result in damage to the product, resulting in a void in the warranty.



Regulatory Information

For regulatory identification purposes, the product is assigned a model number of N743.

Marking labels located on the exterior of your device indicate the regulations that your model complies with. Please check the marking labels on your device and refer to the corresponding statements in this chapter. Some notices apply to specific models only.

1. FCC

FCC



Federal Communication Commission Interference Statement

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.

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.

USA Contact Information

Please add address, phone and email information

RF Exposure Information

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body..

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

2. IC

Canadian Department Of Communications

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

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 radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.*

The device could automatically discontinue transmission in case of absence of information to transmit, or operational failure. Note that this is not intended to prohibit transmission of control or signaling information or the use of repetitive codes where required by the technology.

RF Exposure Information

Cet équipement est conforme aux limites d'exposition aux radiations fixées par la FCC pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et votre corps.

3. CE



Maximum radio frequency (RF) power for Europe:

- Lora 868MHz: 22dBm
- GSM: 33 dBm
- LTE-M/NB-IoT: 23 dBm

Products with the CE marking comply with Radio Equipment Directive (Directive 2014/53/EU) - issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European Standards:

- EN 55032
- EN55035
- EN 301489-1/-17/-19/-52
- EN 300 220
- EN 303 413
- EN301511
- EN301908-1
- EN 301908-13
- EN 62311/EN 62479

The manufacturer cannot be held responsible for modifications made by the User and the consequences thereof, which may alter the conformity of the product with the CE Marking

Declaration of conformity

Hereby, Net Feasa declares that the N743 is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

BATTERY WARNING! : Improperly replaced batteries may present a risk of leak or explosion and personal injury. Risk of fire or explosion if the battery is replaced by an incorrect type. Ensure batteries are installed correctly by following the instructions provided. Mistreated rechargeable batteries may present a risk of fire or chemical burn. Do not disassemble or expose to conducting materials, moisture, liquid, or heat above 75°C (167°F). A battery subjected to extremely low air pressure may result in an explosion or the leakage of flammable liquid or gas. Do not use or charge the battery if it appears to be leaking, discolored, deformed, or in any way abnormal. Do not leave your battery discharged or unused for extended periods. Do not short circuit. Your device may contain an internal, rechargeable battery that is not replaceable. Battery life varies with usage. Non-operational batteries should be discarded according to local law. If no laws or regulation govern, dispose of your device in a waste bin for electronics. Keep batteries away from children.

AVERTISSEMENT CONCERNANT LA BATTERIE : Un remplacement incorrect des piles peut présenter un risque de fuite ou d'explosion ainsi que des blessures personnelles. Il y a un risque d'incendie ou d'explosion si la batterie est remplacée par un type incorrect. Assurez-vous que les piles sont installées correctement en suivant les instructions fournies. Les piles rechargeables maltraitées peuvent présenter un risque d'incendie ou de brûlure chimique. Ne pas démonter ni exposer à des matériaux conducteurs, à l'humidité, aux liquides ou à une chaleur supérieure à 75 °C (167 °F). Une batterie soumise à une pression d'air extrêmement basse peut entraîner une explosion ou la fuite de liquide ou de gaz inflammable. Ne pas utiliser ni charger la batterie si elle semble fuir, décolorée, déformée ou anormale de quelque manière que ce soit. Ne laissez pas votre batterie déchargée ou inutilisée pendant de longues périodes. Ne pas court-circuiter. Votre appareil peut contenir une batterie interne rechargeable qui n'est pas remplaçable. La durée de vie de la batterie varie selon l'utilisation. Les batteries non opérationnelles doivent être jetées conformément aux lois locales. En l'absence de lois ou de réglementations, jetez votre appareil dans une poubelle pour les déchets électroniques. Gardez les piles hors de la portée des enfants.

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	Pursuant to the WEEE EU Directive electronic and electrical waste must not be disposed of with unsorted waste. Please contact your local recycling authority for disposal of this product.
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