# Shelf Camera V2.0

Device Model: 2019-01

Operating manual



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## Specifications

#### Power supply

- Trax Shelf Camera V2.0 Battery model IOT-BAT-2019-1 Or
- 5V/500mA via micro-B USB power only cord see warning

#### Wi-Fi

- 802.11 b/g/n Radio
- Supports WPA2 personal and enterprise security

#### Camera module

- Resolution- 3280x2448, 8MP
- Aspect ratio- 4:3
- f. number- 2.0
- DFOV- 76.7
- PDAF autofocus

## Operating conditions

- For indoor use only
- -20 to 50C operating condition and -40 to 70C storage
- 90% humidity

## System overview

Trax Shelf Camera V2.0 is a low energy, low profile wireless camera for the retail industry.

Trax Shelf Camera V2.0 is designed to capture and digitize the shelf; It consists of a camera controller that can support up to 3 camera modules.

Trax Shelf Camera V2.0 can be powered using a micro-B USB power cable OR on a dedicated battery pack.

- 3 SMA connectors for up to 3 camera modules
- Micro-B USB power input.

### Installation

### Required tools

- Trax Shelf Camera V2.0
- Flat screwdriver
- Hex screwdriver 2.5mm bracket holder

#### Perquisites

Prior to starting the installation, make sure to verify the following things:

- 1. Wi-Fi router, access point or any other Wi-Fi infrastructure
- 2. Gateway device is on and connected both to the local network and the cloud.
- 3. Trax Shelf Camera V2.0 is pre-configured to the installation site

#### Installation steps

- 1. Locate the designated installation spot according to the installation plan.
- 2. Verify the camera controller and camera module position on the shelf use a cable collector to tentatively hold the cable in place.
- 3. Connect the camera modules to the controller unit by screwing the SMA connector clockwise.
- 4. Prepare the installation surface by cleaning any dust or glue residue from the shelf.
- 5. Detach the camera controller holder and the battery pack holder from the units by pulling the rails back.
- 6. Remove the adhesive cover from the two double-sided tape strips on the camera controller holder and the battery pack holder.
- 7. Attach the camera controller holder and the battery pack holder in the designated area. In case more than one battery pack is in use, make sure to fit the holders tightly.
- 8. Slide the camera controller to the end of the sliding rail until a click is heard.
- 9. Slide the battery pack(s) on the rail, make sure that the packs click when attached.
- 10. The camera should turn on once the battery is connected, in case a restart is needed, use the hex screwdriver to push the button on the camera controller for at least 3 seconds.
- 11. Verify the lens position by inspecting the image received in the gateway unit.
- 12. Adjust the camera lens so the frame would include the subject to rotate the lens on its pivot, use the hex screwdriver to loosen (anti-clockwise) or tighten (clockwise) the lens pivot.
- 13. Once adjusted, use the cable collector to collect any remaining slack from the camera cable

## Replacing batteries

When operating on batteries, the camera may require battery replacement from time to time.

- 1. Use a flat screwdriver to push the quick release between the battery and the controller.
- 2. Pull the battery pack(s) back along the sliding rail.
- 3. Slide back new battery pack(s) along the rail, make sure the battery pack(s) click when engaged.

## Troubleshooting

#### Camera does not connect to the network

In case the steps above do not resolve the issue, reach support for assistance- refer to support section

#### Camera head is loose

1. Using a 2.0mm size hex key, turn the screw clockwise to lock its position.

#### Camera does not turn on

#### Battery operated

1. Replace the battery pack with a new one.

#### Power cable operated

1. Make sure the power source is on and supplies 5V @ 500mA

In case the steps above do not resolve the issue, reach support for assistance- refer to support section

#### Camera does not send images

The camera is visible on the network, but images are not sent.

Reach support for assistance- refer to support section

## Support

In case any assistance is needed for installation or operation, please contact support via the TSA app.

## Warnings

Trax Shelf Camera V2.0 is designed for indoor installation.

Power cord operation is only allowed with included micro-b usb cable, any other cable may void warranty and harm the device.

Power cord (DC) operation and battery powered operations are mutually exclusive – **DO NOT CONNECT THE POWER CABLE TO THE BATTERY PACK!** 

In case the Trax Shelf Camera V2.0 is operating using a power cord, the power source must be at 5V @ 500mA (or higher).

### FCC Class B Warning

#### Class B

#### The FCC Wants You to Know

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:

- a) Reorient or relocate the receiving antenna.
- b) Increase the separation between the equipment and receiver.
- c) Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
  - d) Consult the dealer or an experienced radio/TV technician.

#### **CAN ICES-3 (B) / NMB-3 (B)**

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de classe B est conforme à la norme canadienne ICES-003.

## FCC Warning (Modification statement)

Modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment under FCC Rules.

## ISED Warning (Modification statement)

TraxRetail n'approuve aucune modification apportée à l'appareil par l'utilisateur, quelle qu'en soit la nature. Tout changement ou modification peuvent annuler le droit d'utilisation de l'appareil par l'utilisateur.

### FCC RF Exposure Warnings

1. Mobile Device definition: Mobile: (§2.1091) (b) — A mobile device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's radiating structure(s) and the body of the user or nearby persons. Per §2.1091d(d)(4) In some cases (for example, modular or desktop transmitters), the potential

conditions of use of a device may not allow easy classification of that device as either Mobile or Portable. In these cases, applicants are responsible for determining minimum distances for compliance for the intended use and installation of the device based on evaluation of either specific absorption rate (SAR), field strength, or power density, whichever is most appropriate.

#### 2. Statement in UM:

RF Exposure - This device is only authorized for use in a mobile application. At least 20 cm of separation distance between the (Product Name) device and the user's body must be maintained at all times.

## FCC Interference statement (if it is not placed in the device)

This device complies with Part 15 of the FCC Rules and Industry Canada licence-exempt RSS standard(s). 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.

#### Wireless notice

This device complies with FCC/ISED radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines and RSS-102 of the ISED radio frequency (RF) Exposure rules. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Le présent appareil est conforme à l'exposition aux radiations FCC / ISED définies pour un environnement non contrôlé et répond aux directives d'exposition de la fréquence de la FCC radiofréquence (RF) et RSS-102 de la fréquence radio (RF) ISED règles d'exposition. L'émetteur ne doit pas être colocalisé ni fonctionner conjointement avec à autre antenne ou autre émetteur.