

# OPTICON

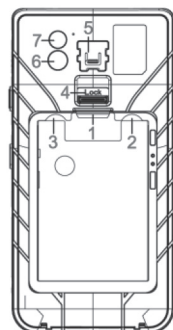
## H-31 H-33 Mobile Computer

### Quick Start Guide



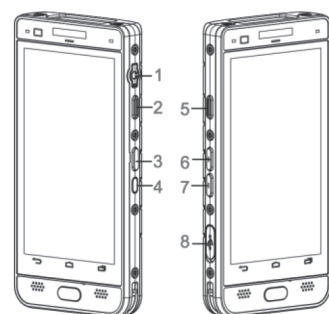
**Front View**

1. Charging LED
2. Logo LED
3. Information LED
4. Back key
5. Home key
6. Menu key
7. Speaker
8. Scan button



**Back View**

1. Battery connector
2. SIM card slot (H-33 model)
3. Micro SD card slot
4. Battery cover lock switch
5. Hand strap hook
6. Back camera
7. Flash LED



**Side View**

1. Earphone connector
2. Scan button
3. Function button
4. Power button
5. Scan button
6. Volume up
7. Volume down
8. USB C connector

### Confirm what is in the Box

BC

- H-31/H-33  
A mobile computer with a barcode scanning feature.
- USB C cable  
Charge/Communication cable.
- Battery box  
With rechargeable battery.
- Hand strap
- Quick Start Guide  
Provides product information and instructions.

\* The number of accessories may differ depending on the product configuration. If any of the accessories are damaged or missing, please contact your local representative.

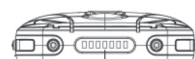
### General View

#### Top View



1. Scan Window

#### Bottom View



1. Cradle IO connect

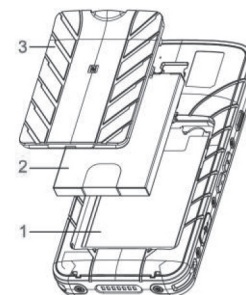
### Charging Instructions

#### Battery Installation

The H-31/H-33 battery pack is initially not fully charged. After installing the battery pack, please charge it via the USB cable or the charging cradle. By default, the battery pack is not installed in the H-31/H-33 at the factory to avoid damage caused by excessive draining.

Annual replacement of the battery pack can avoid possible risks or abnormalities and ensure maximum performance. Do not store fully charged or (almost) empty batteries for long periods of time. We recommend charging spare battery packs every two to three months to keep its charge at a moderate level to maximize battery life.

Please remove the hand strap first when opening the battery compartment. Push the battery cover lock switch to open position then remove the battery cover. Please make sure that the battery contacts are properly aligned with the contacts of the terminal. Close the battery cover and push the cover lock switch to lock.



1. Battery slot
2. Battery pack
3. Battery cover

**CAUTION**  
RISK OF EXPLOSION IF  
BATTERY IS REPLACED BY  
AN INCORRECT TYPE.  
DISPOSE OF USED  
BATTERIES ACCORDING TO  
LOCAL REGULATIONS

#### Charging Time

The required charging time depends on the actual application of the H-31/H-33 and the condition of the battery pack. The H-31/H-33 is shipped with a Lithium-ion battery that is not fully charged. Please fully charge it before the first time use.

#### Charging via USB Cable

Use the provided USB C charge & communication cable together with a quick charge compliant power adapter (QC 3.0 power adapter not included) to charge the H-31/H-33 from a power outlet.

#### Charging via Charging Cradle

Connect the cradle with its power adapter to a power outlet. Place the H-31/H-33 on the cradle for charging.

### SD/SIM Card Installation (H-31/H-33)

1. Turn off the H-31/H-33 or put it in battery swap mode (by pressing the power button for 2 sec and selecting swap mode)
2. Detach the hand strap
3. Remove the battery cover
4. Remove the battery pack by pulling the tab on its end
5. Insert the micro SD card into the left slot
6. Insert the SIM card into the right slot (H-33)
7. Insert the battery pack into the battery compartment
8. Close the battery cover and lock the battery cover lock switch

### Barcode Data Capture

To scan a barcode label:

1. Point the scan window at the barcode.
2. Tap "Scan" on the screen or press one of the

scan buttons on the H-31/H-33. The imager will project a green aiming bar you can use to position the barcode or object within the field of view of the imager.

3. Ensure the entire barcode is within the width area formed by the green aiming bar, then either wait for the timeout or release the scan key to capture the image. A white beam will illuminate the barcode to capture and decode it.

### FCC Compliance for H-31/H-33

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.

This device 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.

#### 15.21 Statement

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

#### FCC RF Radiation Exposure Statement:

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 1cm between the radiator and your body.

For further information please visit [www.opticon.com](http://www.opticon.com)

## General Safety Rules

Please read this Guide thoroughly and carefully before you start using this device. Use only the components and accessories supplied by the manufacturer for H-31/H-33 you are using.

Do not attempt to disassemble H-31/H-33, as it does not contain parts that can be repaired by the user. Any tampering will void the warranty. When replacing the battery pack or at the end of life of H-31/H-33, disposal must be performed in compliance with the laws in force in your jurisdiction. Do not submerge H-31/H-33 in any liquid (water, detergent, etc).

### For Safe Use Concern, Please Pay Special Attention on the Following Notices:

The manufacturer has taken safety as first priority during design stage. To avoid any potential accident, please be cautious on the following alert points:

- Please do not stock this device under conditions of high temperature which may cause the battery to become hot, catch fire, or become defective; leading to failure and safety concerns.
- When the charging time is noticeably longer than normally (CHARGING LED, RED, is still ON), please stop charging immediately. Please charge this device in a location without any water-spray or moisture.
- Ensure that the AC adapter can freely dissipate its heat; don't cover the AC adapter with objects, such as curtains.
- Never use a damaged AC adapter, immediately replace it with a new approved AC adapter.
- Please do not put any heavy weight on top of this device as it might cause the enclosure to crack and lead to injury.
- Please do not pull out the AC adapter with wet hands, which might cause electric shock.
- Please do not use H-31/H-33 AC adapter on any other different devices.
- Please do not put the device into water which may cause short-circuit or fire.
- Please do not put this device in a location close to open fire.
- If the power or USB cable is seriously twisted or broken, please stop using it immediately or it may cause electric shock, short-circuit, or fire.
- Please stop using the device immediately when there is any unusual smell or overheat during charging or operation.
- Please stop using the device immediately when there is any liquid or dew on the device.
- Please do not use the AC adapter outdoors.
- While not used for charging, please remove the AC adapter plug from the wall AC outlet socket.

### Important Notices When Using

- Before replacing battery pack due to failure, shortened life, or any other unusual behavior, please confirm if the device has been used correctly and there has no user operation issue involved.

- It is possible there will be some missed data or interference encountered during the wireless transmission. It is not a situation can be controlled by the manufacturer.
- Please do not use any alcohol, benzene, organic solvent, cleaner liquid, or steel-wool on the surface of this device.
- Please do not scratch the surface of the Scan Window in any way as this will cause problems with barcode scanning.

### Audio Safety

To prevent possible hearing damage, do not listen at high volume for long periods.



### European Union Regulatory Notes

Hereby, Opticon Sensors Europe B.V. declares that the radio equipment type H-31/H-33 is in compliance with Directive 2014/53/EU.

The WiFi operating in the bands 5150 – 5250 MHz shall be restricted to indoor use for the following countries: AT, BE, BG, CH, CY, CZ, DE, DK, EE, EL, ES, FI, FR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, UK.

The full text of the Declaration of Conformity is available at the following internet address: <https://opticon.com/product/h-31-and-h-33/>

### SAR Compliance (H-33EU)

Head: 0.894 W/kg@ 10g (CE)

Body: 1.788 W/kg@ 10g (CE)

### FCC SAR (H-33NCSA)

Head: 0.98 W/kg@ 1g (FCC)

Body: 1.13 W/kg@ 1g (FCC)

### SAR Compliance (H-31)

Body: 0.216 W/kg@ 10g (CE)

### FCC SAR (H-31)

Body: 0.65 W/kg@ 1g (FCC)

### RF Exposure Information (SAR)

This device was tested for typical body-worn operations. A minimum separation distance must be maintained between the user's body and the handset, including the antenna: 1.0 cm to comply with the RF exposure requirements in Europe and United States. Third-party belt-clips, holsters and similar accessories used by this device should not contain any metallic components. Body-worn accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided.

## Power and Frequency Ranges

H-31, H-33 EU, H-33 NCSA

| Radio Type | Description      | Model        | Frequency         | Maximum Output |
|------------|------------------|--------------|-------------------|----------------|
| Bluetooth  | Bluetooth BR+EDR | All models   | 2402-2480 MHz     | 16.22dBm       |
|            | Bluetooth 4.2    | All models   | 2402-2480 MHz     | 5.93dBm        |
| WLAN       | 2.4GHz           | All models   | 2412-2472 MHz     | 21.28dBm       |
|            | 5GHz             | All models   | 5180-5240 MHz     | 14.02dBm       |
| GSM        |                  | All models   | 5745-5825 MHz     | 14.08dBm       |
|            | GSM 850          | H-33 NCSA    | 824.2-848.8 MHz   | 30.71dBm       |
|            | GSM 900          | H-33 EU      | 880-915 MHz       | 32.49dBm       |
|            | GSM 1800         | H-33 EU      | 1710-1785 MHz     | 30.22dBm       |
| WCDMA      | GSM 1900         | H-33 NCSA    | 1850.2-1909.8 MHz | 28.13dBm       |
|            | WCDMA Band I     | H-33 EU      | 1920-1980 MHz     | 22.96dBm       |
|            | WCDMA Band II    | H-33 NCSA    | 1852.4-1907.6 MHz | 23.56dBm       |
|            | WCDMA Band V     | H-33 NCSA    | 826.4-846.6 MHz   | 23.24dBm       |
| LTE        | WCDMA Band VIII  | H-33 EU      | 882.4-912.6 MHz   | 23.71dBm       |
|            | LTE Band 1       | H-33 EU      | 1922.5-1977.5 MHz | 23.41dBm       |
|            | LTE Band 2       | H-33 NCSA    | 1850.7-1909.3 MHz | 23.76dBm       |
|            | LTE Band 3       | H-33 EU      | 1710.7-1784.3 MHz | 23.78dBm       |
|            | LTE Band 4       | H-33 NCSA    | 1710.7-1754.3 MHz | 23.61dBm       |
|            | LTE Band 5       | H-33 EU/NCSA | 824.7-848.3 MHz   | 23.55dBm       |
|            | LTE Band 7       | H-33 EU/NCSA | 2502.5-2567.5 MHz | 23.98dBm       |
|            | LTE Band 8       | H-33 EU      | 880.7-914.3 MHz   | 23.79dBm       |
|            | LTE Band 12      | H-33 NCSA    | 699.7-715.3 MHz   | 23.12dBm       |
|            | LTE Band 20      | H-33 EU      | 834.5-859.5 MHz   | 23.91dBm       |
| other      | LTE Band 38      | H-33 EU      | 2572.5-2617.5 MHz | 22.95dBm       |
|            | LTE Band 40      | H-33 EU      | 2302.5-2397.5 MHz | 23.84dBm       |
|            | NFC              | All models   | 13.56 MHz         | 62.56dBuV/m    |
|            | GNSS             | All models   | 1559-1610MHz      | N/A            |

## Documentation

Documentation, drivers and software updates for the H-31/H-33 are available at: [www.opticon.com](http://www.opticon.com)

Opticon Sensors Europe BV  
Opaallaan 35, 2132 XV Hoofddorp, the Netherlands.

© Copyright Opticon. All rights reserved.

This information is subject to change without prior notice. For availability, contact your local representative.

