# RFID Reader
# GPScanID 100

# Instruction Manual &
# User Guide

**(Rev 2.5)**

**Please read these instructions thoroughly before use and always keep accessible**

**METISID Limited**

# Contents

# 1. Welcome

Thank you for purchasing the GPScanID 100 Portable RFID Stick Reader. We hope you find your reader easy to use and of a high quality that is built to last.

Please take the time to become familiar with your reader and to thoroughly read the safety precautions, assembly and operating instructions before use.

Keep this manual handy for easy reference. It is your guide to safe and efficient operation. A downloadable copy of this guide is also available at:

https://www.METISID.net/Download/Manual/METISID100.pdf

# 2. Package Contents


Readers purchased as a standard package include the following components:

1. GPScanID 100 Reader;
2. 25cm Detachable Antenna with locking collar;
3. Data/Charging Cable;
4. Battery Charger;
5. Carrying Case;
6. User Manual and USB Stick (with Desktop Software);
7. Ear Tag Samples.

Readers purchased as a Premium Pack include the following components in addition to the Standard Pack components:

8. Spare Battery (Premium Pack Only);
9. Charging Dock (Premium Pack Only).

Please contact your local supplier if you are missing any component(s) from your pack.

# 3. Getting to know the Reader

The GPScanID 100 is a ruggedly built portable reader specifically designed for reading livestock RFID tags. It is fully compliant with ISO standards ISO 11784/11785 for FDX-B and HDX technologies.
The GPScanID 100 has a wide range of built-in functions, including

- Detachable antenna (available in two sizes) for reading different livestock;
- Large internal storage of up to 400,000 ID records in up to 1000 sessions, with each session identifiable by its own date and time stamp, and optional GPS location details and 4 user input fields.
- It supports connectivity to a wide range of peripherals such as Personal Computers, SmartPhones, Weigh Scales, and Bluetooth Label Printers through RS-232, USB, Bluetooth® and WiFi (for future enabling) technologies.


| | Item | Function |
|---|---|---|
| 1 | Detachable Antenna | Reads RFID transponders. Available in 25cm lengths. |
| 2 | Antenna Locking Collar | Secures the detachable antenna. |
| 3 | 2.4” Display | Displays menu items and messages. |
| 4 | Green (Right) LED Indicator | Indicates tags are read correctly. |
| 5 | Red (Left) LED Indicator | Indicates battery charging state and read errors. |
| 6 | 5-Way Menu Selector | Navigates the menu and makes the selection.<br><br>**Menu/OK Key**: Press to make selection or press and hold to switch between Main Menu and Read Menu.<br><br>▲▼◄► **Keys**: To navigate through the Menu.<br><br>◄►: Also act as function keys to select the action items highlighted in ◄ or ► |
| 7 | Red Read Button | Turns on the reader and reads tags when activated. |
| 8 | Battery Cap | Secures, shields and protects the removable battery. |
| 9 | Data/Charging Cap | Shields and protects the data/charging connector. |

# 4. Reader assembly and initial Set Up

## 4.1 Assemble and charge the Reader

**Step 1: Connect a Detachable Antenna to the Reader**

Take the reader by the handle.

Twist the locking collar in an anti-clockwise motion until it is completely unthreaded.

Remove the locking collar from the Reader.

Take a Detachable Antenna and push the connector end of the antenna onto the connector end of the Reader.

Slide the Locking Collar over the end of the Detachable Antenna.

Fasten the locking collar back into place on the reader by turning it clockwise until firm (do not overtighten).

The Reader is now ready to charge before turning on.

**Step 2: Charging the Reader**

Remove the Data/Charging Cap at the end of the Reader by turning the cap in an anti-clockwise motion.

Connect and fasten the Data/Charging Cable to the Data/Charging port on the Reader using a clockwise motion to secure the cable in place.

Plug the connector on the cable of the Battery Charger into the socket at the back of the 9 pin serial data connector on the Data/Charging Cable.

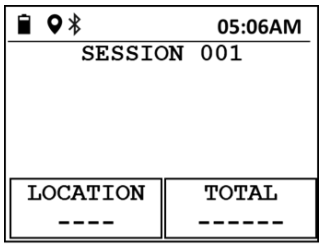
Plug the Battery Charger into mains power and turn the power on. A red light will indicate the Reader battery is charging.

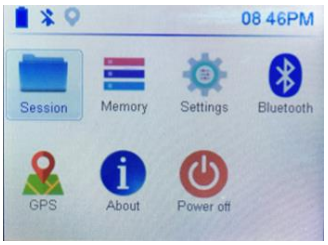
The Reader will take about 1 ½ hours to fully charge.

## 4.2 Turning the Reader On / Off

### Turning the Reader On

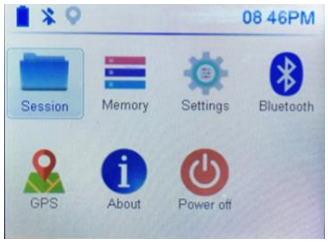
**Press and hold the Red Read Button** for 3 seconds. The start-up screen will display the **GPScanID 100 logo followed by the Session screen.** Press and hold the **Menu/OK button** to display the **Main Menu screen** as shown below to go to the Main Menu options.

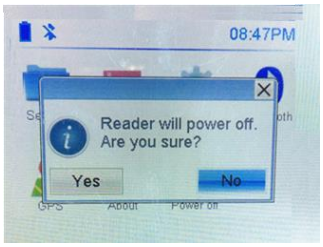




### Turning the Reader Off

To turn off the reader, **press and hold the Menu/OK button** until the Main Menu screen appears. Navigate to **Power Off icon** using the ▲▼◄► **Keys** then press the **MENU/OK button**. The display screen will ask you to confirm you want to power off the reader, select **Yes** then press the **Menu/OK button**. The reader will display a message saying Powering off and vibrate before the display screen goes black.

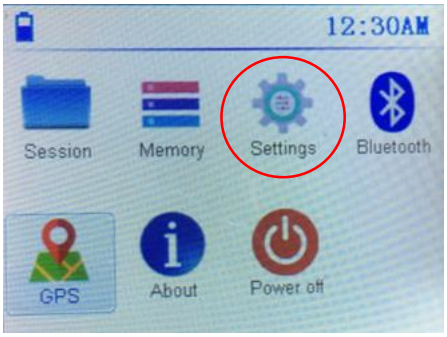


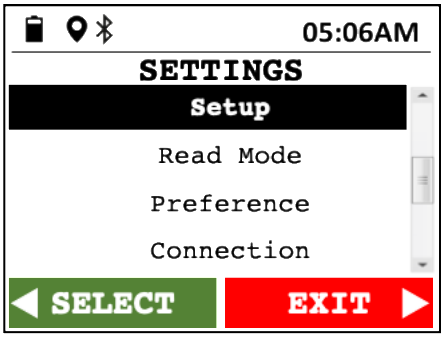
## 4.3 Initial Reader set up

It is recommended that the Name, Date/Time, Time Format and Auto Update options are set up before use as you will need these when connecting to other devices or retrieving tag information.

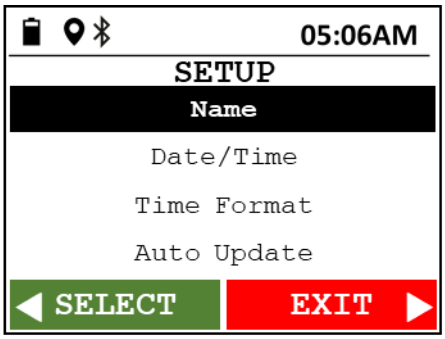
On the **Main Menu** screen, use the ▲▼◄► **Keys** to navigate to the **Settings icon** then press the **MENU/OK Button** to select.




The following **Settings menu** will appear.




Use the ▲/▼ **keys** to navigate to **Setup** then press the ◄ **key or MENU/OK button** to select. The following Setup menu will appear.



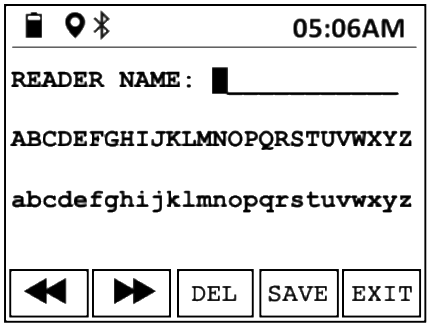

The menu will default to the **Name** setting. Start by setting up the **Name** of the reader then proceed through each of the other settings using the instructions on the proceeding pages.

## How to set up the Reader Name

The reader name is used to identify the reader during Bluetooth and WiFi connections (note WiFi connections are not yet enabled but this feature will be available in the future).

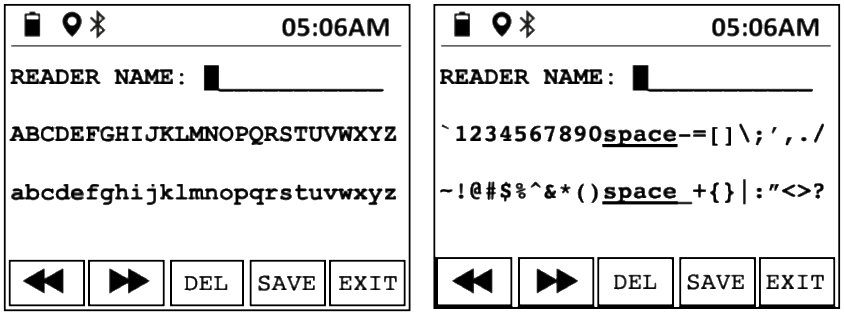
If the **Name** setting is not highlighted, use the **▲/▼ Keys** to navigate to the **Name** setting in the Date/Time Menu then press the **◄ key or MENU/OK button** to select.

The **Reader Name** prompt screen will appear.




Use the **▲▼◄► Keys** to navigate between the rows and to the first character of the reader name then press the **MENU/OK button** to select. Repeat for each character of the name. Use the **◀◀** and **▶▶** buttons to toggle between the alpha and numeric symbol input screens.

Note: Names can be up to a maximum of 8 alpha-numeric digits.

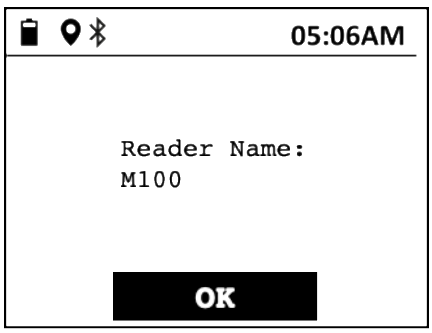



To **delete** a character, navigate to **DEL** using the **▲▼◄► Keys** and press the **MENU/OK button** to delete a single character. Repeat to remove more characters if needed.

To **exit** the name set-up at any time**,** navigate to **EXIT** using the **▲▼◄► Keys** and press **MENU/OK button** to exit to the previous screen.

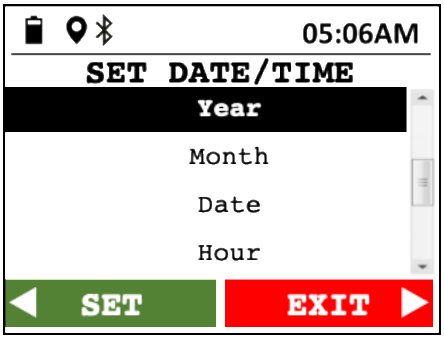
After the reader name is entered, navigate to **SAVE** using the **▲▼◄► Keys** and press the **MENU/OK button**. The following confirmation screen will display the reader name.

Press the **MENU/OK button** to select OK and exit.



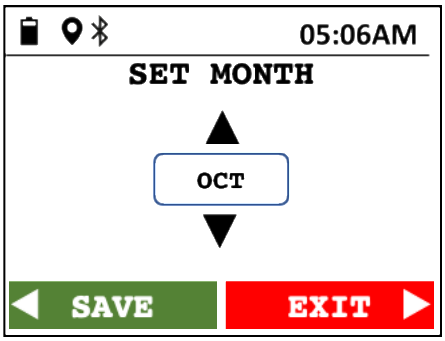
## How to set up Date and Time

Use the ▲/▼ **Keys** to navigate to **Date/Time** in the Date/Time Menu and press ◄ **key** or **MENU/OK button** to set up the Reader's date and time. The following screen is displayed. This is the system time that will record when tags are read, and tag data stored.




Use the ▲/▼ **keys** to navigate to each input field and press the ◄ **key** to select, then press **MENU/OK button** to save and exit the setting.

For example, the following is displayed if **Month** is selected. Use the ▲/▼ **keys** until the correct month is displayed then press the ◄ **key or MENU/OK button** to select. The press the **MENU/OK button** to save and exit back to the other date/time fields.



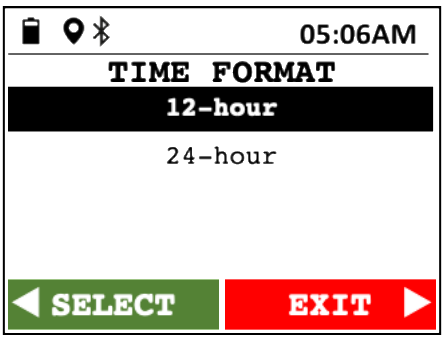

Use the ▲/▼ arrows keys to navigate through each field to set up each of the values until all date and time settings are accurately setup.

Press the ► **key** to exit back to the main Setup screen.

## How to set up Time Format

The reader time format is defaulted to **12-hour** format from the manufacturer.

To change or check this setting, use the ▲/▼ **Keys** to navigate to **Time Format** in the Date/Time Menu and press ◄ **key** or **MENU/OK button** to set up the Reader's time display format in either 12- or 24-hour time. The following screen is displayed.

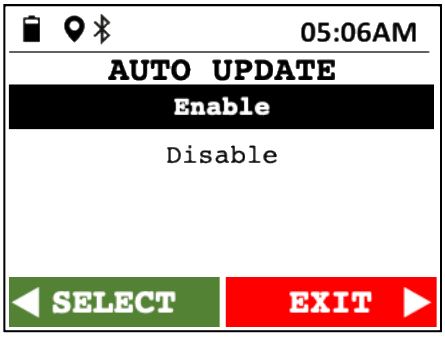



Press the ► **key** to exit back to the main Setup screen.

## Setting Up Auto Update

Auto Update, if enabled, is used to automatically adjust the reader's date/time to the same setting when connected to an external peripheral device such as Personal Computer or SmartPhone. The default value for Auto Update is **Enabled**.

To change or check this setting, use the ▲/▼ **Keys** to navigate to **Auto Update** in the Date/Time Menu and press ◄ **key** or **MENU/OK button** to select. The following screen is displayed.



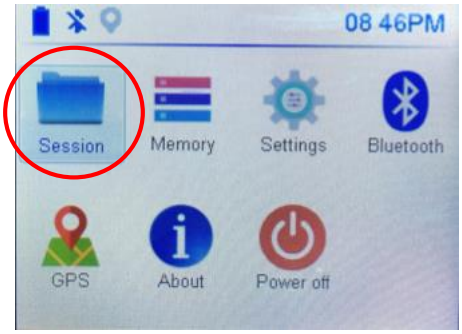

Use the ▲/▼ **Keys** to select Enable or Disable and press ◄ **key** or **MENU/OK button** to select.

## 4.4 Getting ready to read a tag

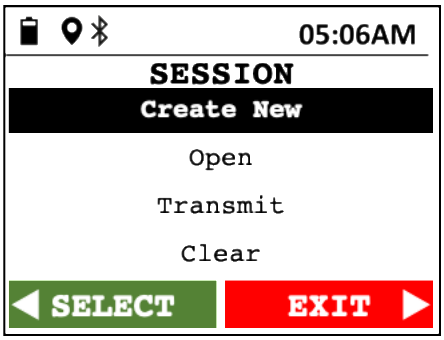
To read tags, a session must be selected. A user can either create a new session or open an existing one.

### 4.4.1 How to create a new session

i. Go to the Main Menu, use the ▲,▼,◄, ► Keys and press the MENU/OK button to select Session.




ii. The Session screen will appear. Use the ▲/▼ Keys to navigate to Create New and press the MENU/OK button to select create a new session.




iii. The following screen will display.

There are 2 options to create new sessions:

a) **Auto Create** (using a sequential Session Number)
Use the **▲/▼ keys** to navigate to **Create** and press **◄Key** or **MENU/OK button** to select. The reader automatically creates a session number by incrementing the current largest saved session number. The following confirmation screen will be displayed.


b) **Create Session Name**
Use the **▲, ▼ keys** to navigate to **Create with Name** and press **◄ key** or **MENU/OK button** to select. The **Session Name** screen will appear as shown below.


Use the **▲, ▼, ◄, ► Keys** to navigate between the rows and to the first character of the session name then press the **MENU/OK button** to select. Repeat for each character of the name. Use the **◀◀** and **▶▶** buttons to toggle between the alpha and numeric symbol input screens.

Note: Names can be up to a maximum of 8 alpha-numeric digits.

To **delete** a character, navigate to **DEL** using the **▲, ▼, ◄, ► Keys** and press the **MENU/OK button** to delete a single character. Repeat to remove more characters if needed.

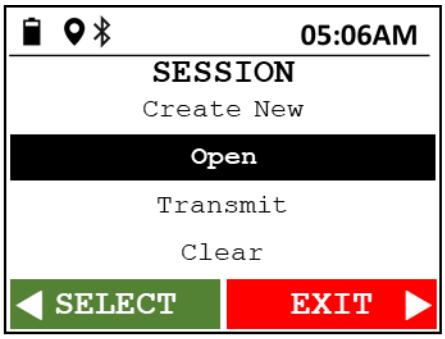
To **exit** the session name set-up at any time**,** navigate to **EXIT** using the **▲, ▼, ◄, ► Keys** and press **MENU/OK button** to exit to the previous screen.

Press the **MENU/OK button** to confirm.

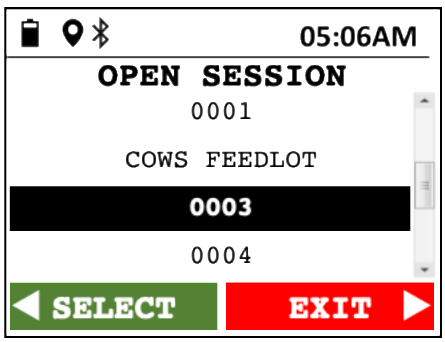
iv. After the session name is entered, navigate to SAVE using the ▲, ▼, ◄, ► keys and press the MENU/OK button. After the session name is saved, the following confirmation screen is displayed.


### 4.1.2 How to open a saved session

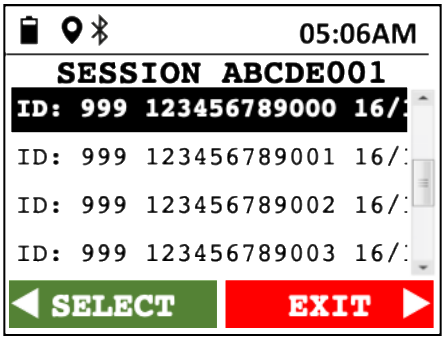
i. In the Session menu, use the **▲, ▼ keys** to navigate to **Open**. Press the **◄ key** or **MENU/OK button** to select.



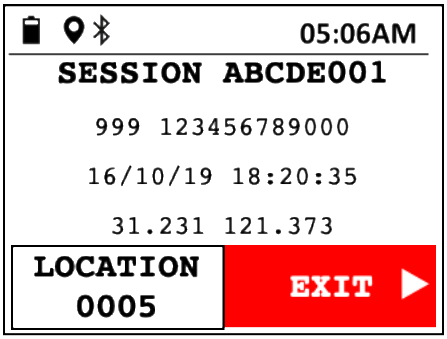

ii. Use the **▲, ▼keys** to navigate the session list to find the Saved Session. If a session name was entered, it will be displayed instead of the session number. Press the **◄ key** or **MENU/OK button** to select and open the saved session.



iii. IDs saved in a session are displayed on the screen as follows. If the **READ** button is pressed, newly read tags will be saved in the current open session.




Use the **▲, ▼keys** to navigate to the appropriate ID. Press the **◄ key** or **MENU/OK button** to select and view the ID details. The details are displayed on the screen as follows.

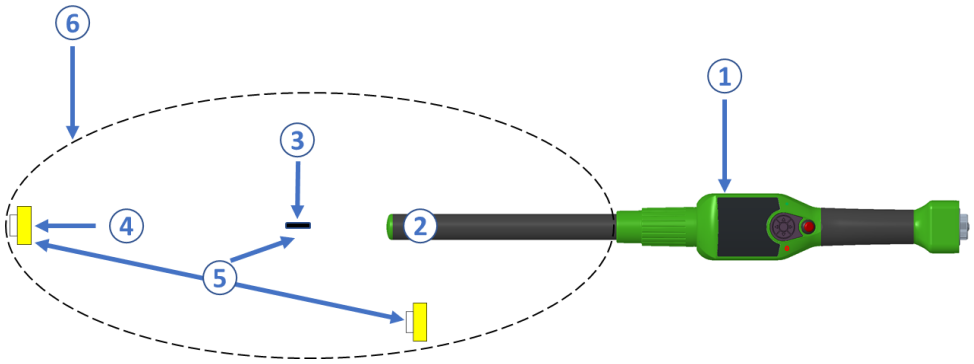



You can use the **▲, ▼keys** to scroll through the IDs in this session.

To **exit the session**, press the ► key.

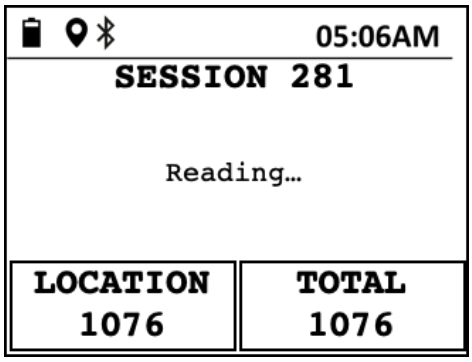
### 4.1.3 How to Read a Tag

The reader will read tags if they are scanned in the proximity of its antenna. See diagram below.




| Item | Legend | Comments |
|---|---|---|
| 1 | METISID Reader | |
| 2 | Antenna | |
| 3 | RFID Implant | |
| 4 | RFID Ear Tag | |
| 5 | Best Orientation | Best orientation of ear tag for antenna |
| 6 | Reading Zone | Area in which ear tags and implants can be read |

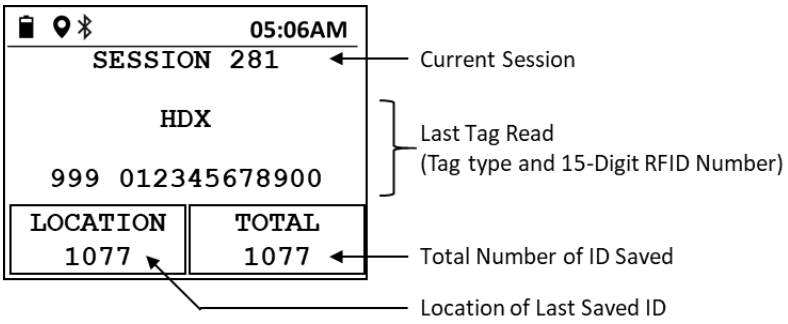
Once you are in a new or saved session, you can start to read tags by pressing the **red Read** button. The following screen is displayed while tags are reading.




If a valid tag is read the following will occur:

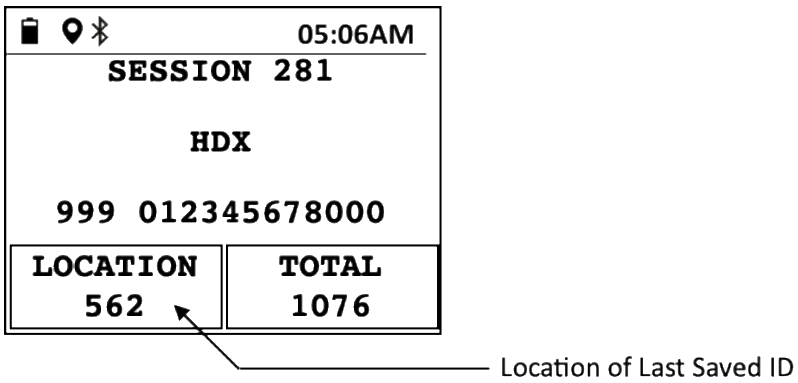
- Backlight on the display lights up
- Green LED to the bottom right of the display flashes twice
- Reader emits 2 short beeps and 1 short vibration
- ID number will display on the screen and will be saved into reader's memory with its timestamp (and GPS location, if GPS is enabled)
- the reader counter and location counter will both increment to the next number

Invalid tags are tags that have already been scanned in the same session (i.e. they are not a duplicated tag reading) or tags that fail to read.



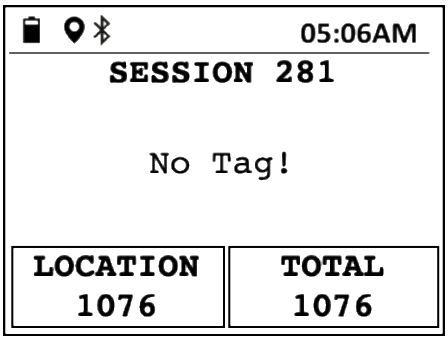

If a duplicated tag is read, the following is shown:

- Backlight on the display lights up
- Green LED to the bottom right of the display flashes once
- Reader emits 1 short beep and 1 short vibrate
- ID number will display on the screen but will not be saved into the memory
- Bottom left counter shows the location where the ID was saved in the session
- Bottom right counter remains unchanged



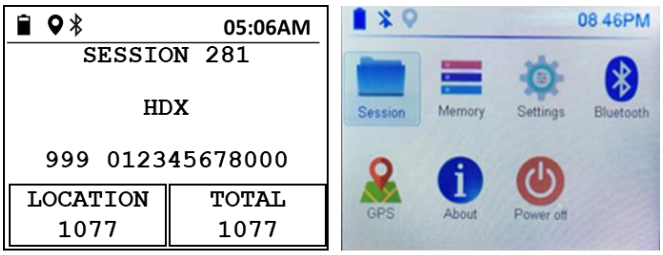

If no tag is read, the following is shown:

- Backlight is turned on
- Red LED stays on for 1 second
- Reader displays “NO TAG!” warning
- Reader emits 1 long beep and 1 short vibrate
- Both counters remain unchanged

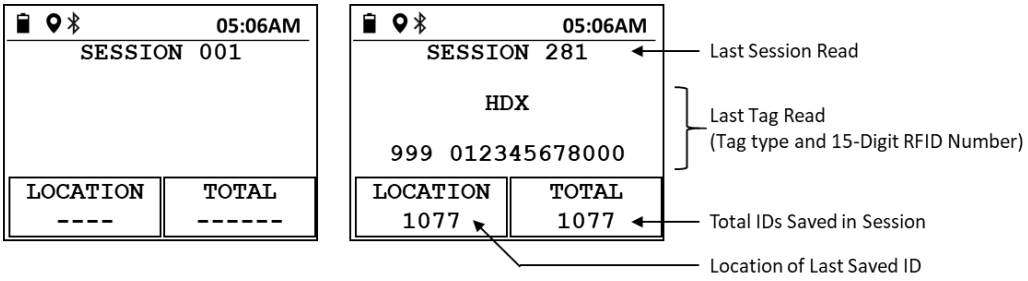


### 4.1.4 Navigating between the Main Menu and Current Read Session Screens

Press and hold the **Menu/Ok Button** for 1 second to navigate to the Main Menu from the current Session.




To return to the current Read Session press the red Read button. You can return to the and Read Menu as shown below (for a brand-new reader and one showing the prior read ID respectively).




Note: For a reader that has been used, you can start reading and saving tag ID's in the last created session once the reader has been turned on.

If you want save ID's in a new session after turning the reader on, you will need to create a new session. For instructions on how to **Create a new Session** see page 14.

### 4.1.5 Other Functions and Settings

For other reader functions and settings please refer to the Menu Tree details page 30.

# 5. Connecting with Other Devices

The reader can connect and communciate with various types of peripheral devices including personal computers, smart phones, weigh scales and Bluetooth label printers to expand the reader's capabilities.

A connection must first be established between the reader and the device before use. The GPScanID 100 reader supports both wired connection (such as RS-232 or USB) and wireless connection (such as Bluetooth (note WiFi connectivity is to be enabled in due course. Software upgrades will be available when this option becomes available).

## 5.1 Connecting with Personal Computers

The GPScanID 100 reader supports both wired and wireless connection (such as RS-232, USB and Bluetooth) with Personal Computers running Windows 8™ and Windows 10™ operating systems.

**To connect with a wired connection (RS-232 or USB)**

GPScanID 100

Turn on both the reader and the computer

Loosen the data/charging cap on the reader.

Connect the data/charging cable to the reader.

Connect the other end of the data/charging cable using either RS-232 or USB with the Computer

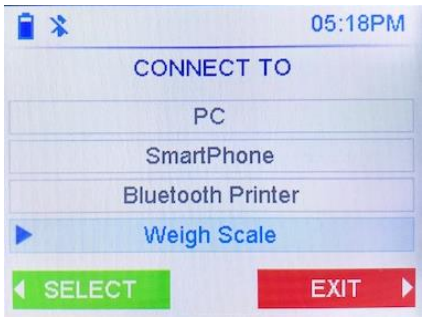

On the reader, go to **Settings > Connection > Cable > PC** to set the serial connection parameters


Open the METISID Desktop Software on your computer. The software is supplied on a USB drive with the reader or you can download the latest version of the software from:

http://www.METISID.net/download/software/METISID_Desktop_SoftwareXXX.exe

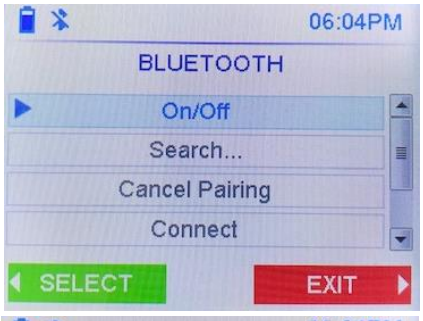
**To connect using Bluetooth connection**


Turn on both the reader and the Bluetooth Enabled Windows computer



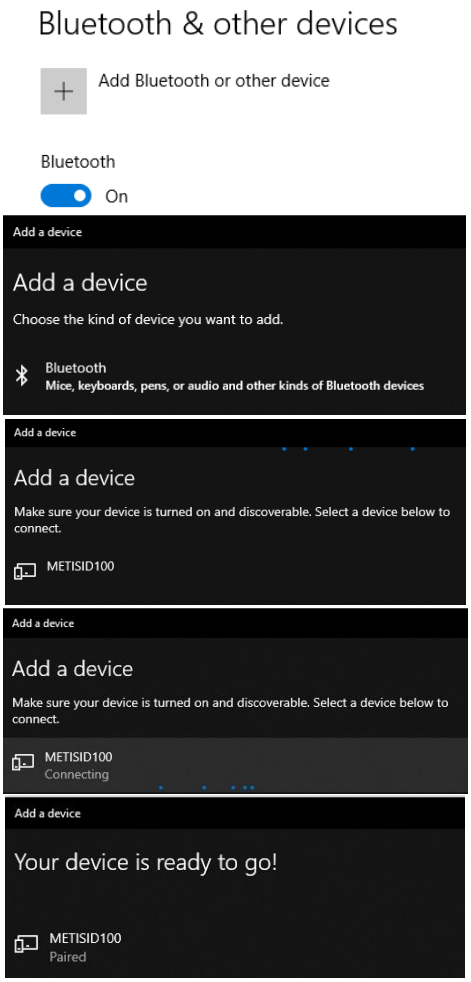


On the reader, go to **Settings > Connection > Bluetooth > PC** to set the Bluetooth connection parameters





On the reader, go to **Bluetooth > On** to and select **On** to turn on the Bluetooth function




On the Computer, go to Bluetooth settings and turn on the Bluetooth function. Then select **add a bluetooth device** and search for the reader. Once you have identified the reader **click on the reader details** to connect/pair with the reader. When connected the PC shoud identify the reader as being **paired.**

If a PIN is required, enter 0000.

Once paired, open the METISID Desktop Software on your computer. The software is supplied on a USB drive with the reader or you can download the latest version of the software from:

http://www.METISID.net/download/software/METISID_Desktop_SoftwareXXX.exe

## 5.2 Connecting with Smart Phones

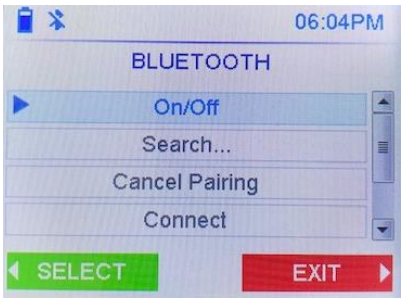
The GPScanID 100 reader can connect to iOS Smartphones via Bluetooth through the third party iLivestock APP (Android version available later).

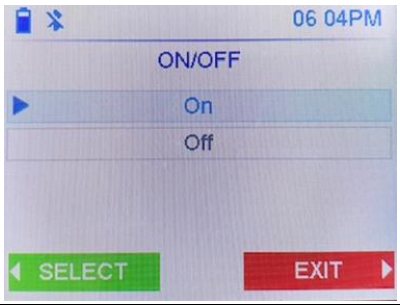
**To establish Bluetooth connection**


Turn on both the reader and the Smartphone

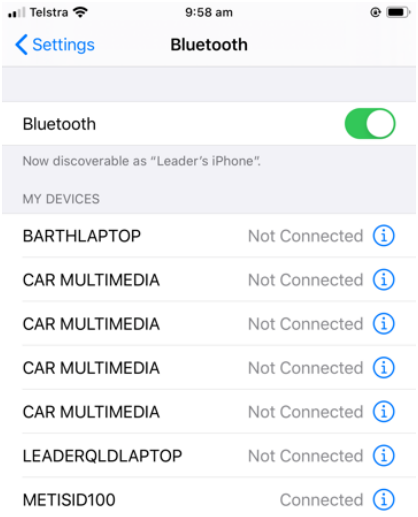


On the reader, go to **Settings > Connection > Bluetooth > SmartPhone** to set the Bluetooth® connection parameters




On the reader, go to **Bluetooth > On/Off** and select **On** to turn on the Bluetooth function




On the SmartPhone, turn on the Bluetooth® function and Search for the reader

If a PIN is required, enter 0000

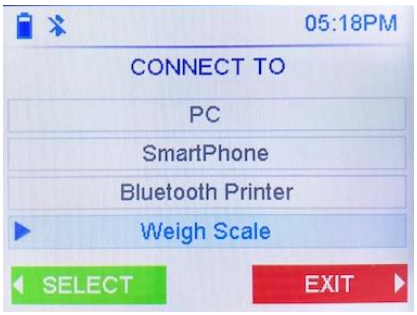
On your SmartPhone, open the APP iLivestock (the APP is available from the Apple APP Store). (Note: an android version of the APP will be available in the future.)

Please refer to iLivestock for further operating instructions.

## 5.3 Connecting with Weigh Scales

The GPScanID 100 reader uses Bluetooth to connect with Weigh Scales. **To establish Bluetooth connection**

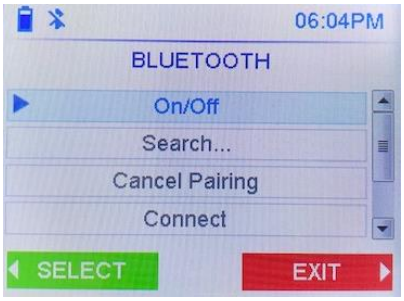

Turn on both the reader and Weigh Scale



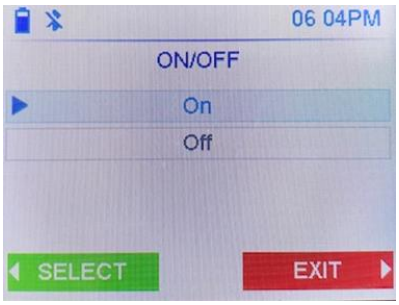


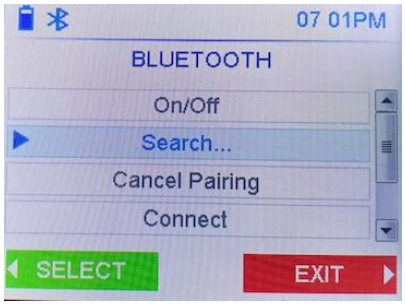
On the reader, go to **Settings > Connection > Bluetooth > Weigh Scale** to set the Bluetooth connection parameters

On the Weigh Scale, turn on the Bluetooth function (please refer to the Weigh Scale menu and user guide for further instructions)




On the reader, go to **Bluetooth > On/Off** and select **On** to turn on the Bluetooth function




Then select **Bluetooth > Search** to search for the Weigh Scale

Input the PIN of the Weigh Scale if required to complete pairing.

For further operating instructions, please refer to Weigh Scale menu and user guide.

## 5.4 Connecting with Bluetooth Label Printers

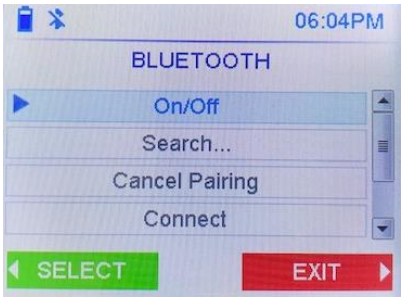
The GPScanID 100 reader can connect to Bluetooth label printers. **To establish Bluetooth connection**

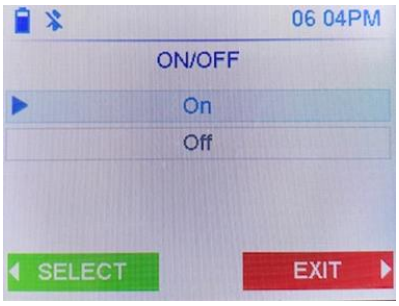

Turn on both the reader and Label Printer



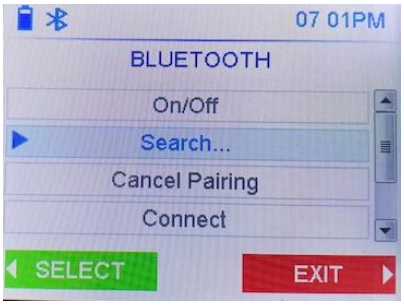
On the reader, go to **Settings > Connect > Bluetooth-> Bluetooth Printer** to set the Bluetooth connection parameters

Turn on the Bluetooth function of the label printer (please refer to the Label Printer menu and user guide for further instructions).




On the reader, go to **Bluetooth > On/Off** and select **On** to turn on the Bluetoothfu nction




Then select **Bluetooth > Search** to search for the Weigh Scale.

Input the PIN of the label printer if reqired to complete pairing.

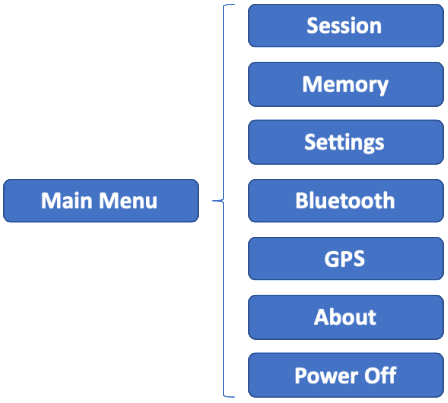
For further operating instructions, please refer to Bluetooth Label Printer menu and user guide.

# 6. Menu tree

## 6.1 Main Menu

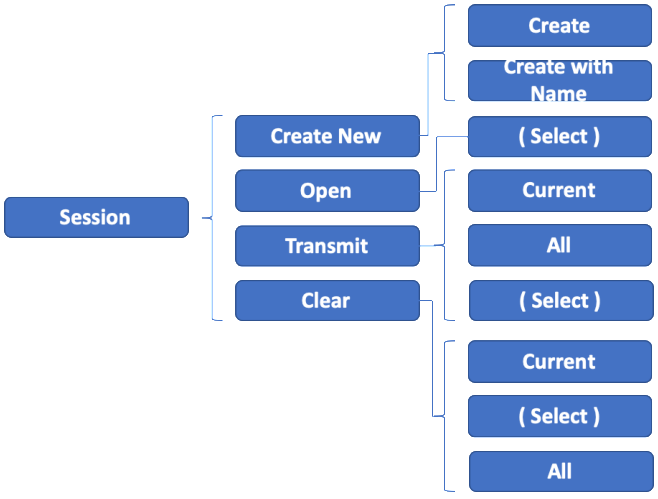
The main menu consists of 7 key functions. Each of them consists of sub-menu items to perform various operations or to adjust settings. The menu trees are listed in the subsequent sections.

To move between menu options and settings follow the screen prompts and use the ▲▼◄► **Keys** to move between settings on each screen display and press **MENU/OK button** to select. You can also use the ◄/► **Keys** to Select and Exit setting options.




## 6.2 Session Menu

The Session Menu allows the user to perform operations regarding creating, opening, transmitting and clearing sessions.




| | |
|---|---|
| **Create New** | Create a new session with automatically set session numbers or a specified session name. |
| **Open** | Open an existing session from all saved sessions by selecting from the list. |
| **Transmit** | Transmit a specified session or all sessions from the reader to a connected peripheral device (you will need to connect to the peripheral device prior to transmitting). |
| **Clear*** | Clear user specified session or all sessions from the reader memory. |

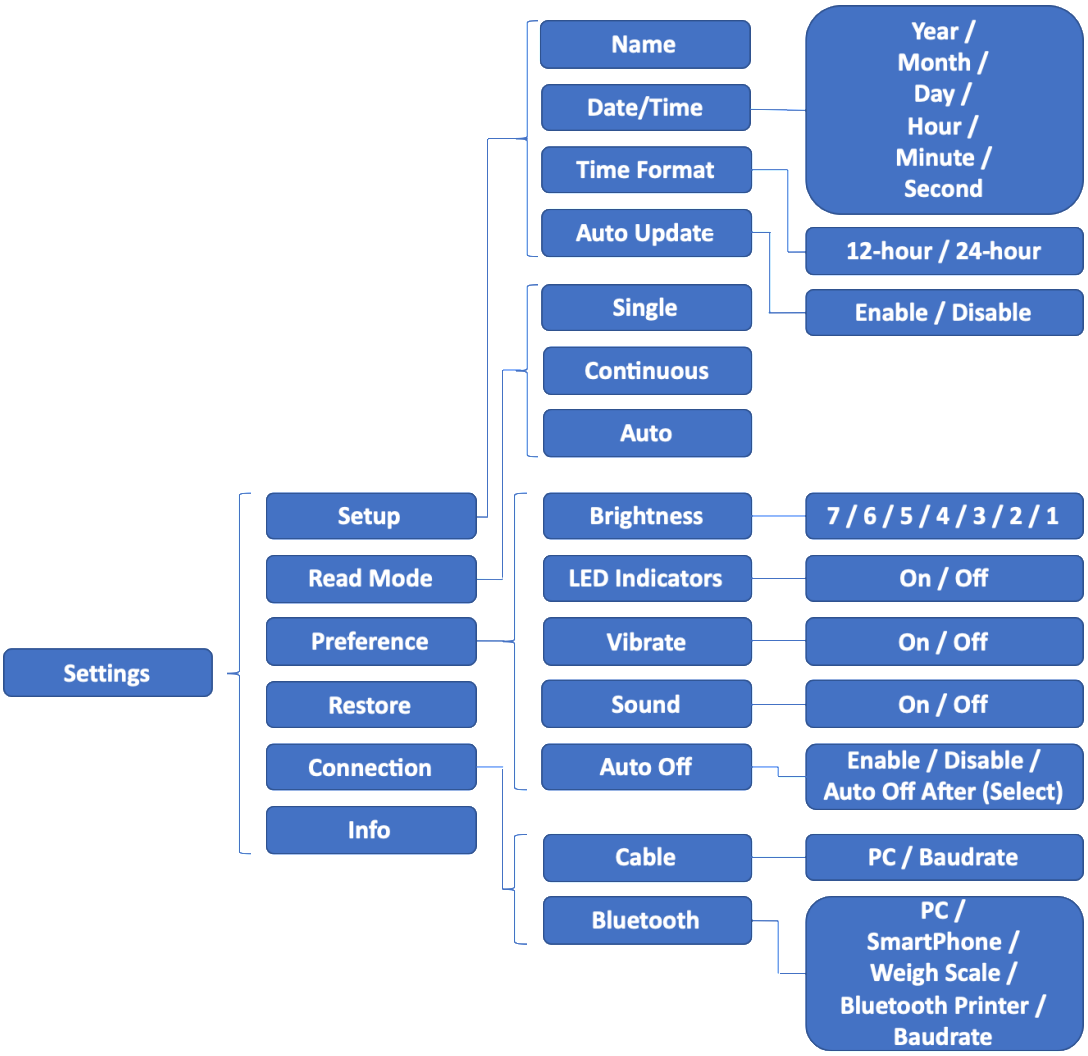
Please note the **Clear** function will not delete the actual session/s. The session/s will be put into a "Recycle Bin" temporarily where users can retrieve the deleted session/s through the METISID Desktop Software. (See METISID Desktop Software User Menu for details).

## 6.3 Memory Menu

The Memory Menu allows the user to view the status of the reader memory usage by indicating the number of ID's saved, number of sessions and overall memory used.


## 6.4 Settings Menu

The Settings menu allows the user to customize the parameters in the reader.




**Setup** Initial setup parameters of the reader including Name, Date/Time, Date Format and Auto Update (refer to page 9 for detailed instructions)

**Read Mode** Allows you to set the read mode as Single, Continuous or Auto.

**Single mode** requires pressing the Read button every time you want to read a tag. The reader tries to read a tag for 10 seconds. You must press the Read button again to read another tag, regardless a tag is read or not.

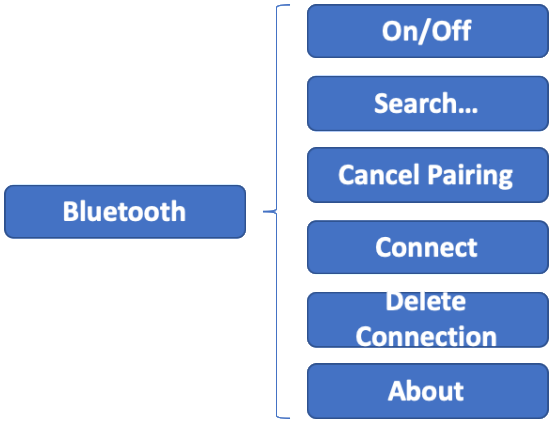
**Continuous mode** will allow you to read multiple tags once the Read button is pressed. It stops when the Read button is pressed again. The reader beeps continuously when reading starts. It beeps twice quickly when a tag is read.

**Auto mode** will allow you to read tag one at a time by pressing the Read button or continuously read tags by pressing and holding the Read button for more than 1 second. When reading tags continuously, the reader beeps continuously and will issue 2 quick beeps if a tag is read. Reading stops when the Read button is pressed again.

| | |
|---|---|
| **Preference** | Allows you to adjust reader settings such as display brightness, turn LED indicators on / off, turn vibrate on / off, turn sound on / off and turn Auto off on / off (Auto off allows the reader to turn off after a certain period of inactivity). |
| **Restore** | Allows you to restore the reader to the original factory settings. All recorded Sessions and IDs will not be deleted and will remain on the reader. |
| **Connection** | Use this menu to set up connection parameters with different peripheral devices, including the baud rate. Baud rate is the speed of transmission of data between connected devices. |
| **Info** | Shows the current settings of the reader. |

## 6.5 Bluetooth Menu

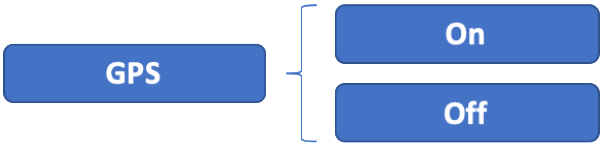
The Bluetooth menu allows the user to modify the settings and operate on the Bluetooth® function in the reader.




| | |
|---|---|
| **On/Off** | Turns the Bluetooth function on / off on the reader. |
| **Search…** | Allows you to search for Bluetooth-enabled peripheral devices in proximity to the reader. |
| **Cancel Pairing** | Allows you to disconnect the current connected Bluetooth peripheral device. |
| **Connect** | Shows a list of peripheral Bluetooth device connections previously established with the reader for you to connect to quickly. |
| **Delete Connection** | Shows a list of previously established Bluetooth device connections. You can delete previous connections individually or you can delete all previous peripheral devices at once. |
| **About** | Shows information about the current Bluetooth connection. |

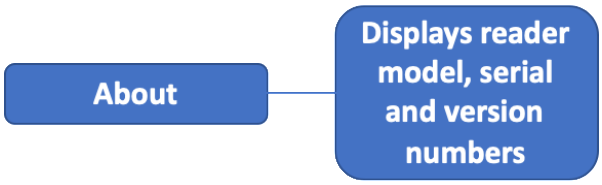
## 6.6 GPS Menu

The GPS menu allows the user to turn the GPS function on or off.




## 6.7 About Menu

The About menu shows the version and model information about the reader.



# 7. Alerts

The reader provides a range of visual, audio and vibration alerts when in use. The following table summarizes the events and the default alerts. You can customize certain settings by enabling or disabling them to suit your preferences.

| **Events** | **Buzzer** | **Display** | **LED Indicators** | **Vibration** |
|---|---|---|---|---|
| Power On | 3 short beeps | GPScanID 100 Logo with backlight switched on and stays for 3 sec | Both flashes stay on until METISID logo disappears | 3 short vibrations |
| Power Off | 5 short beeps | Powering Off is displayed. Screen is dimmed then switched off | Both flashes stay on until power off | 5 short vibrations |
| Any of the 5 buttons are pressed | 1 short beep | Turns Screen backlit on. Display changes accordingly to button hit response | | |
| Read Button is Pressed | 1 short beep | 1. Reading… is displayed<br>2. Backlight switched off immediately | Red LED stays on for 1 second | |
| No Tag Read | 1 long beep | No Tag Read is displayed | Red LED stays on for 1 second | 1 short vibration |
| A Non-Duplicate Tag is Read | 3 short beeps | 1. Backlight switches on<br>2. RFID number displayed with both counters incremented | Red LED flashes once and Green LED flashes twice | 1 short vibration |
| Duplicate Tag is Read | 2 short beeps | 1. Backlight switches on<br>2. RFID number displayed. Left counter shows location of ID already saved. Right counter remains unchanged | Red LED flashes once then Green LED flashes once | 1 short vibration |
| Restore Factory Settings | 1 long beep<br>(3 seconds) | 'Resetting' is displayed for 3 seconds then screen is turned off momentarily before displaying the last session used | Both LED stays on for 3 seconds | 1 long vibration<br>(2 seconds) |
| Connection Lost<br>(Serial, Bluetooth or WiFi connection lost or fail during data transfer) | One long beep<br>(2 seconds) | Connect Lost is displayed | Red LED flashes twice | |
| Memory Almost Full (>90% used) | 1 short beep | Memory Almost Full is displayed | Red LED flashes twice every 15 minutes | |
| Memory Full | 1 long beep<br>(2 seconds) | Memory Full is displayed | Red LED stays on 2 seconds every 15 minutes | |
| Charging Battery | 1 short beep when charging starts | Turn backlight on for 1 minute. Battery Indicator flashes with battery level and shows adjacent lightning icon | Red LED stays on | |
| Low Battery (when battery level falls below 10%) | 1 short beep | Battery Low is displayed 1 second once every 5 minutes | Red LED flashes twice | |
| Sending session(s) during data transfer | 1 short beep when completed | Sending… | Red LED flashes once | |
| Receiving session(s) during data transfer | 1 short beep when completed | Reading… | Red LED flashes once | |

# 8. Specifications

| **General Features** | |
|---|---|
| Norms | ISO 11784 and full ISO 11785 for FDX-B and HDX tags.<br>IP67 with battery inside and cap screwed onto connector |
| User Interface | 2.4” 240x320 Colour Graphical display<br>5-way Key and Read Button<br>Buzzer, LED Indicators and Vibrator<br>Serial port, USB port, Bluetooth and WiFi (to be enabled) module |
| USB Interface | CDC class (Serial Emulation) and HID class |
| Bluetooth Interface | Dual mode Class 1 (up to 100m), Class 4.2 Low-Energy (10-15m), Serial Port Profile (SPP) and iPod Accessory Protocol (iAP) |
| Serial Interface | RS-232 (9600N81 by default) |
| Memory | Up to 500 sessions with a max. 4,000 IDs per session<br>Total up to 400,000 animal IDs |
| Battery | 7.4VDC – 2900mAh removable Li-Ion rechargeable |
| Battery Charge Duration | 1.5 hours to full charge |

| **Mechanical Specifications** | |
|---|---|
| Dimensions | 670 x 60 x 70 mm (26.4 x 2.4 x 2.8 in) with 60cm Wand<br>530 x 60 x 70 mm (26.4 x 2.4 x 2.8 in) with 30cm Wand |
| Weight | 1,180 grams with 60cm Wand<br>1,150 grams with 25cm Wand |
| Operating Temperature | -20°C to +55°C |
| Storage Temperature | -30°C to +70°C |
| Humidity | 0% to 80% |

| **Reading Distance** | |
|---|---|
| HDX | Up to 50cm |
| FDX-B | Up to 30cm |

# 9. Frequently Asked Questions

| Issue | Possible Cause(s) | Remedial Action(s) |
|---|---|---|
| Reader won't turn on | • Read button has not been held long enough to turn the reader on<br>• Reader has no battery, or the battery is flat | • Press and hold Read button and hold for 3 seconds<br>• Check if battery is inserted and/or charge battery accordingly |
| Reader not reading tags | • Detachable wand is not inserted properly<br>• Antenna is broken<br>• Memory is full | • Check detachable is connected properly in reader<br>• Try reading different tags. If problem persists, contact your distributors for technical assistance to purchase a replacement antenna<br>• Connect your reader to PC and back up the reader's entire memory. Then erase it to free up storage space. |
| Reader is 'frozen' and not responding to input | • Possible software clashes | • Force reset the reader by removing and replacing the battery. Contact your distributor for technical assistance if problem persists. |
| Reader not charging | • Data/Charging cable and charger not connected properly<br>• Charger not connected properly to cable or power outlet | • Check connections between data/charging cable, charger, and reader are connected properly<br>• Ensure plug connector on charger is secured in place on the charger<br>• Make sure charger is plugged into power outlet and power is turned on |
| | • | • |

# 10. Regulatory

**USA – FCC**

**Information to the user (FCC Part 15.105)**

Note: 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.

**Modification warning (FCC Part 15.21)**

Warning: Any changes or modifications not expressively approved by Worldwide Planet Limited could void the user's authority to operate this equipment.

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.

RF exposure statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment ,this device has been evaluated to meet general RF exposure requirment,The device can be used in portable exposure condition .The distance close to teh finger usually should be 130mmfor 2.4G WiFi and 80mm for Bluetooth/BLE .

**Europe CE**

This device has been tested and meets the Electromagnetic Compatibility requirements for **EN300 330.**

**Australia and New Zealand - RCM**

This device has been tested and meets the Electromagnetic Compatibility requirements for **CISPR 11.**

**Antenna Warning**

This device has been designed to operate with the antennas listed below. The GPScanID 100 Series Readers are only approved with the antennas below.

| Part Number | Antenna Housing Length | Antenna Description |
|---|---|---|
| GPScanID 100-Wand-25cm | 250mm | 190mm Ferrite Rod Antenna |

# 11. Accessories

| Part Number | Description |
|---|---|
| GPScanID 100-Wand-25cm | 25cm Detachable Antenna |
| GPScanID 100-Battery | Spare Battery Pack |
| GPScanID 100-Charger | Battery Charger |
| GPScanID 100-ChargingDock | Charging Dock |
| GPScanID 100-CigaretteCharger | Cigarette Charger |
| GPScanID 100-Cable | 1.5m Data/Charging Cable |
| GPScanID 100-Collar | Locking Collar for Antenna |
| GPScanID 100-Cap | Battery and Data/Charging Cap |
| GPScanID 100-Case | Metal Carrying Case with Padded Foam Inside |

# 12. Warranty

Manufacturer guarantees this product against all defects due to faulty materials or workmanship for a period of **18 months** from the date of purchase. The warranty does not apply to any damage resulting from an accident, misuse, disassembling the unit, modification and/or an application other than that described in this user manual and for which the device was designed to operate.

If the product malfunctions during the warranty period, the manufacturer will repair or replace it free of charge. The Customer is responsible for the shipment costs to return the reader for replacement or repair. The Manufacturer is responsible for the return shipment costs.

Please refer all servicing to the Manufacturers approved and qualified technical service personnel only. Servicing is required when the reader has been damaged in any way, including but not limited to the power supply, data/charging cable, data/charging plugs or connectors, liquid spills or foreign objects penetrating inside the equipment, or if the unit is exposed to extreme temperatures or excessive mechanical stress.