REGULATORY INFORMATION

RoHS COMPLIANT

This product is RoHS Compliant (2011/65/EU).

FCC

FCC ID: S6J1128

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

The reader operates using the specified frequencies up to the maximum output powers as in the table below:

Radio	Frequency of operation	Maximum Output Power
Bluetooth®	2.4 GHz - 2.4835 GHz	3 dBm
UHF RFID	902 MHz - 928 MHz	29 dBm

HEALTH AND SAFETY RECOMMENDATIONS

Ergonomic Recommendations

Caution: In order to avoid or minimize the potential risk of ergonomic injury, follow the recommendations in the 1128 User Guide (www.tsl.com/1128-downloads). Consult with your local Health & Safety Manager to ensure that you are adhering to your company's safety programs to prevent employee injury.

Power Supply

Use only TSL®-approved cradles, chargers and power supplies with the 1128 Reader. Use of an alternative power supply will invalidate any approval given to this device, void the warranty for the product and may be dangerous.

Battery Safety

Disposal of a battery into fire or a hot oven, or mechanically crushing or cutting a battery, can result in an explosion.

Leaving a battery in an extremely high temperature environment can result in an explosion or the leakage of flammable liquid or gas.

A battery subjected to extremely low air pressure may result in an explosion or the leakage of flammable liquid or gas.

CAUTION! ⚠

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.

DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

SUPPORT

User Documentation

To download the 1128 User Guide, visit: www.tsl.com/1128-downloads

Troubleshooting

If you are having difficulties using your 1128 Reader, please use the online Troubleshooting Guide at www.tsl.com/troubleshooting-guides.

If you have consulted both the 1128 Reader User Guide and the online Troubleshooting Guide and still need assistance, contact TSL® at: www.tsl.com/contact.

Made for iPhone | iPad | iPod

Waste Electrical and Electronic Equipment (wEEE)

For EU Customers: All products at the end of their life must be returned to TSL® for recycling. For information on how to return product please contact TSL®.

TERMS & CONDITIONS

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Warranty Information

For warranty information and provisions, please see the Warranty section of the 1128 Reader User Guide (available to download at www.tsl.com/1128-downloads)

ABOUT TSL®

TECHNOLOGY SOLUTIONS UK LTD
part of **HID**

Technology Solutions UK Ltd (TSL®), part of HID Global, is a leading manufacturer of high performance mobile RFID readers used to identify and track products, assets, data or personnel.

For over two decades, TSL® has delivered innovative data capture solutions to Fortune 500 companies around the world using a global network of distributors and system integrators. Specialist in-house teams design all aspects of the finished products and software ecosystems, including electronics, firmware, application development tools, RF design and injection mould tooling.

TSL® is an ISO 9001:2015 certified company.

ISO 9001: 2015

Contact

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Website:	www.tsl.com

ABOUT HID GLOBAL

HID

HID Global powers the trusted identities of the world's people, places and things. We make it possible for people to transact safely, work productively and travel freely. Our trusted identity solutions give **people** convenient access to physical and digital **places** and connect **things** that can be identified, verified and tracked digitally. Millions of people around the world use HID products and services to navigate their everyday lives, and billions of things are connected through HID technology. We work with governments, educational institutions, hospitals, financial institutions, industrial businesses and some of the most innovative companies on the planet. Headquartered in Austin, Texas, HID Global has over 4,000 employees worldwide and operates international offices that support more than 100 countries. HID Global is an ASSA ABLOY Group brand.

For more information, visit www.hidglobal.com.

TECHNOLOGY SOLUTIONS UK LTD
part of **HID**

QUICK-START GUIDE

1128

BLUETOOTH® UHF RFID READER

FCC

www.tsl.com

v2.02
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PARTS OF THE READER

Technology Solutions' 1128 Reader provides Ultra High Frequency (UHF) Radio Frequency Identification (RFID), with optional barcode scanning functionality. The unit can be used stand alone or paired with a *Bluetooth®* wireless technology enabled host device. The 1128 can read and write to EPC Global Class 1 Gen 2 UHF RFID transponders.

For detailed information on setting up and using the 1128 Reader, please visit www.tsl.com/1128-downloads to download the 1128 Reader User Guide.
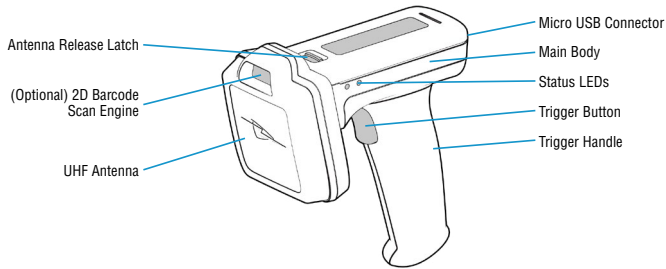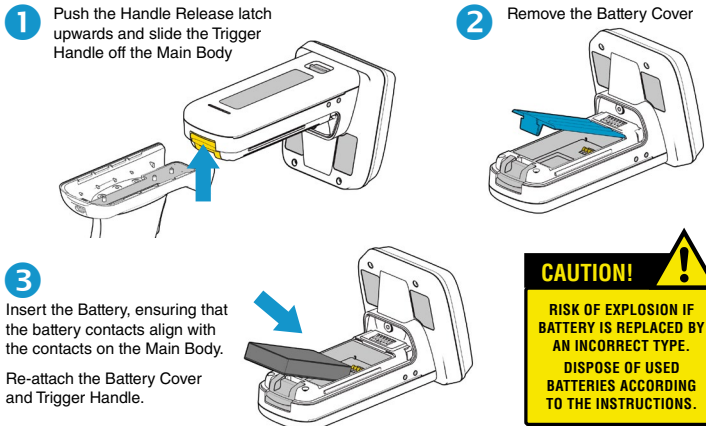
Antenna Release Latch

(Optional) 2D Barcode Scan Engine

UHF Antenna

Micro USB Connector

Main Body

Status LEDs

Trigger Button

Trigger Handle

FIGURE 1: Parts of the 1128 Reader

BATTERY INSTALLATION

The battery is charged using the supplied micro USB lead and therefore is unlikely to need to be changed once installed. To access the battery compartment the grip handle must first be removed.

1 Push the Handle Release latch upwards and slide the Trigger Handle off the Main Body

2 Remove the Battery Cover

3 Insert the Battery, ensuring that the battery contacts align with the contacts on the Main Body.

Re-attach the Battery Cover and Trigger Handle.

CAUTION!

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

CONNECTING THE USB CABLE

The 1128 Reader kit is supplied with a Micro-USB lead for charging and synchronisation. A USB PSU is also supplied for independent charging of the 1128 Reader. The Micro-USB cable is inserted into the 1128 Reader as shown below.
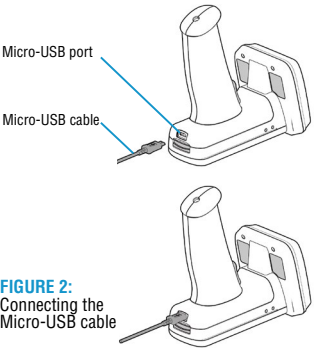
Micro-USB port

Micro-USB cable

FIGURE 2: Connecting the Micro-USB cable

CHARGING

To comply with international shipping regulations, **all batteries included with TSL® products are discharged to less than 30% of their maximum capacity when shipped**. It is therefore important that the unit is fully charged before using your 1128 Reader for the first time.

The 1128 Reader can be charged using the supplied USB charger and Micro USB cable.

The USB Power Adaptor (PSU) should be connected to an accessible power outlet to permit easy disconnection if required.
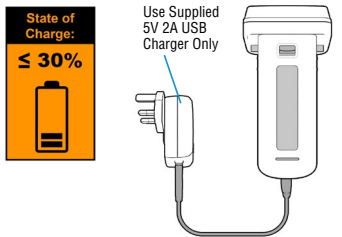
State of Charge:

≤ 30%

Use Supplied 5V 2A USB Charger Only

FIGURE 3: Charging the 1128 Reader

STATUS LEDS

The status LEDs on the left and right sides of the 1128 Reader provide an indication of the operating status:
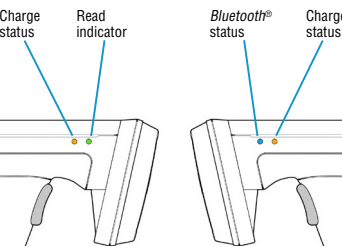
Charge status

Read indicator

Bluetooth® **status**

Charge status

FIGURE 4: Location of status LEDs

LED	Status
Blue slow flash (50% on, 50% off)	The Reader is awake but there is no connection
Blue constant	The Reader is awake and connected to a host
Short green flash	The Reader has successfully read a tag or barcode or executed the alert command
Green slow flash (50% on, 50% off)	Antenna error - try reseating the antenna
Orange slow flash (50% on, 50% off)	Battery low warning (<10% capacity remaining), please recharge immediately
Orange short single slow flash	Battery charging with battery level less than 33%
Orange short double flash	Battery charging with battery level less than or equal to 66%
Orange short triple flash	Battery charging with battery level greater than 66%
Orange rapid flash	There is a charge error / battery fault
Orange constant	The Reader is fully charged
All off	The Reader is off and not charging

PAIR WITH A *BLUETOOTH®* HOST DEVICE

Install a compatible application (such as TSL's RFID Explorer App) on your smartphone, tablet or other Blueooth compatible host device. The RFID Explorer App can be downloaded from the App Store, Google Play and Windows Phone Store. Squeeze the trigger button to wake up the 1128 Reader - wait for the blue LED light to start flashing (if it does not flash, check the battery is charged and properly installed).

In your host device's '*Bluetooth®* Settings' page, search for and pair with the 1128 Reader. In the list of *Bluetooth®* devices, the 1128 Reader will be identified by its serial number (xxxxxx-xx-1128). Make sure the reader hasn't 'timed-out' and gone to sleep, as it will not be discoverable.

DEVICES	
000301-EU-1128	Not Paired
010926-EU-1128	Not Paired
PC00347LW7	Not Paired
018421-EU-1128	Not Paired

Once paired, the Blue LED will stop flashing and stay on continuously.

Open your compatible application and select the 1128 Reader from the list of available devices.

The 1128 Reader should now be ready to use!

For further information on connecting a TSL® Reader, visit www.tsl.com/connect-reader/bluetooth.

BLUETOOTH® MODES

PLEASE NOTE: The 1128 Reader supports two different modes of operation over *Bluetooth®*:

1. *Bluetooth®* SPP Mode (Default)
In this mode, the 1128 Reader will only work with Apps that have been written with specific support for the 1128 Reader. SPP Mode allows access to the full range of features available on the 1128 Reader.

The 1128 Reader must be set to SPP mode in order to work with RFID Explorer or any of the other TSL® Demo Apps (www.tsl.com/apps).

2. *Bluetooth®* HID Mode
In HID mode, the 1128 Reader appears as a *Bluetooth®* Keyboard, making it compatible with the majority of Apps or Web Apps. Apps receive input as key strokes from the Reader. HID mode is limited to reading single tags one at a time.

Further Information
For a detailed comparison between *Bluetooth®* HID and SPP modes - and instructions on how to switch between these modes - download the '*Bluetooth® HID mode*' and '*Comparison of Bluetooth® Modes for TSL® UHF Readers*' documents from www.tsl.com/1128-downloads.

BUTTON OPERATION

The 1128 Reader has a Primary button action and a Secondary button action, which can be initiated by single or double-clicks of the Trigger Button:

Single-click and hold:
Primary action (by default, the Primary action scans for UHF transponders).

Double-click and hold:
Secondary action (by default, the Secondary action initiates the barcode scanner - this is only available when using the 2D Imager Antenna variant).

The Single and Double-click button options are also programmable for custom applications.
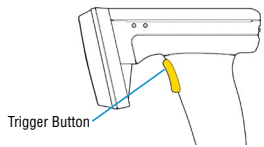
Trigger Button

FIGURE 5: Trigger Button location

READING TRANSPONDERS

RFID transponders can be read when they are in range of the antenna. The antenna is located on the front of the 1128 Reader. The range at which a transponder can be read depends on the transponder type and size, and the number of transponders in the field.
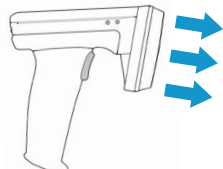
FIGURE 6: Antenna read direction