

# Link/2500

## User Guide



[www.ingenico.com](http://www.ingenico.com)

28-32, boulevard de Grenelle, 75015 Paris - France / (T) +33 (0)1 58 01 80 00 / (F) +33 (0)1 58 01 91 35

Ingenico - SA au capital de 47 656 332 / 317 218 758 RCS Nanterre

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# 1\_Introduction

We hope that you will be fully satisfied with your new terminal Link/2500 I. This terminal is available in different models. Please select by yourself in this documentation items related to your model.

Read this guide to understand and make the best use of your terminal. It presents you the necessary information about use, installation, maintenance, safety and security recommendations.



## WARRANTY / SECURITY

Use only the power supply included with the product to ensure best performance and safety. Maintenance should only be provided by Ingenico authorized technician.

Failure to comply with these instructions will void the manufacturer's responsibility.

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This symbol indicates an important Warning.

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This symbol indicates a piece of advice.

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FOR ISED:

Operation of 5150-5250MHz is restricted to indoor use only

## 2\_Presentation

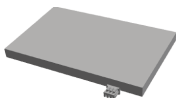
### 2\_1 Content of the box

#### 2\_1\_1 Terminal

- Link/2500 terminal unit



- A battery pack disconnected (except Integration version)



- USB Cable



- User guide



#### ADVICE

Keep the packaging. It must be re-used whenever the terminal is shipped.

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## 2\_2 Overview of the Link/2500



Terminal unit



Touch or Dual head version

➤ 2"4 LCD Display (Touch panel in option)

➤ Contactless reader

➤ Smart card reader



➤ Magnetic card reader (second head in option)

Compartment where are located (except Integration version):

- the battery pack
- the modules SAM1/SIM1 & SAM2/SIM2



Compartment where are located for Dual magnetic head version :



	Standard	Slim version	Integration version	Touch version	Dual Head version
Weight	155g	121g	128g	165g	168g
Dimensions (L x w x h)	129x70x 17 mm	129x70x 13 mm	129x70x 14 mm	129x70x 18,4 mm	129x70x 19,4 mm
Electrical mains network / PSU	100-240VAC / 50-60 Hz - Class II equipment				
Connections on terminal	USB C connector				

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## 2\_3 Keyboard details and functionality



Some keys can have other functions according to the applications that are in the terminal.



The functions key accesses the different application menus

The red key cancels the procedure in progress

The yellow key cancels the last character

The green key validates input selections and information. It is also used to switch on the terminal

## 2\_4 Touch panel (option)

The Link/2500 device could be equipped with touch panel that allows you capture functions and menus by your finger or using a stylus.



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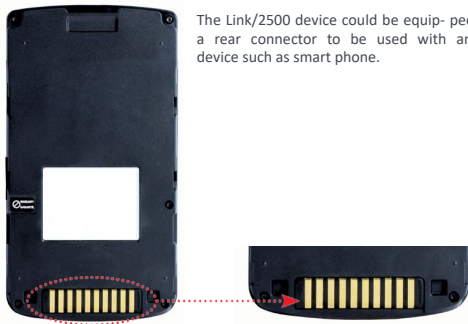
## 2\_5 Dual magnetic head (option)

The Link/2500 device could be equipped with a second magnetic head.



## 2\_6 Link/2500 I Integration version (option)

The Link/2500 device could be equipped with a rear connector to be used with another device such as smart phone.



## 3\_Use of the terminal

### 3\_1 Switching off the terminal

If the battery is empty and the terminal in use is removed from its base, the terminal automatically shuts off.

It may also be switch off by pressing simultaneously  and  (yellow key) for one second.

In order to restart the terminal, press  on the keyboard.

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## 3\_2 Reading card

### Magnetic stripe card

The card can be read either from right to left or left to right, with the stripe facing the terminal. Use a regular movement in order to ensure a reliable card reading.



### Option Dual magnetic head version

The card be read either from right to left or left to right, with the strip either facing or backing the terminal. Use a regular movement in order to ensure a reliable card reading.



### Smart card

- **Card reader** : insert the card horizontally with the **chip facing upwards** and leave in position throughout the transaction.



### Contactless

- Bring the card firmly up to the active zone. Keep the card close to the reader during the transaction
- The 4 virtual LEDs are displayed during the transaction.

The terminal behavior for the cardholder may depend on : The terminal

- environment
- Local usage (language...)



## 4\_Installation

### 4\_1 Recommendation

#### Location of the Link/2500

The terminal should be placed far from any very hot zones, protected from vibrations, dust, damp and electromagnetic radiation (computer screen, anti-theft barrier etc.).

#### Operating conditions (battery discharging)

Ambient temperature	from -10°C to +50°C
Max relative humidity	85% at +40°C

#### Battery charging conditions

Ambient temperature	from +0°C to +40°C
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#### Storage conditions

Ambient temperature	from -20°C to +55°C
Max relative humidity	85% at +55°C

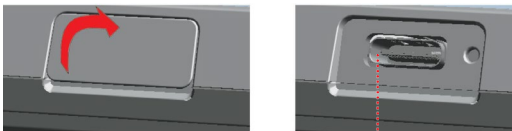
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## 4\_2 USB Terminal connections

### 4\_2\_1 USB type C

- There is an USB connector (USB type C) on the right side of the Link/2500 Wireless terminal (see below picture). This connector manages Host and Slave connexions.
- The terminal supports USB Keys with FAT16 or FAT32
- The USB Key has to be used with an USB adapter (refers to accessories section)

#### USB type C



Connector used for PC travel charger, USB Key, etc...

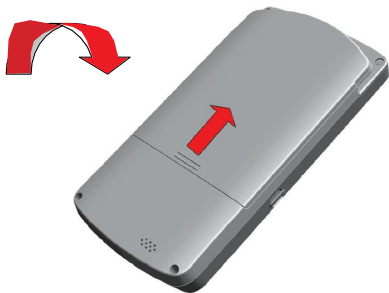
## 4\_3 Opening trap door



### CAUTION

Switch off the terminal before opening the trapdoor.

- Turn the terminal and unclip the trapdoor by pushing on the clip with as shown with the arrows on the picture



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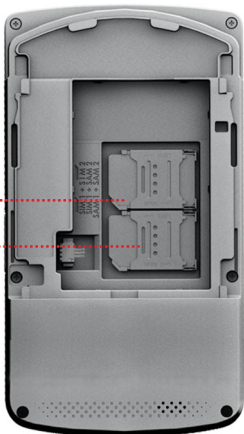
- Dual magnetic head option : Turn the terminal and unclip the trapdoor by pushing on the clip with as shown with the arrows on the picture.

## 4\_4 SAMs & SIMs

The connector modules security SAM/SIM is located inside the terminal, in a closed compartment. SAM and SIM location depend of the product. There is 3 possibilities : SIM1/SIM2 or SIM1/SAM2 or SAM1/SAM2.

- SAMs and SIMs are identified by the engraved marks on the lower housing
- When introducing a SAM/SIM in its slot, be sure to put the cut corner as indicated on the engraved marks

- SAM 2 Connector (Dual SIM terminals)
- SAM 1 Connector (Dual SIM terminals)



## 4\_5 Battery

### 4\_5\_1 Main characteristics

Characteristics	Li-ion 1200 mAh Li-ion 630 Ah (for Slim and Integration version)
Charge (power supply-1.0A)	80% capacity in 1h; full capacity in 1.5 hours

\* The battery capacity depends on the model of terminal and its use

### 4\_5\_2 Installing the battery (except Integration Version)



#### WARNING

Check that the terminal is not connected to the main electric network.

- Turn your terminal and unclip the battery trapdoor by pushing on the button as shown on the picture (for Dual magnetic head option see section 4\_3)
- Disengage the trapdoor
- Take the battery pack included in the box
- Locate the battery pack connector beside the battery compartment
- Plug the battery pack connector according to the connector locating system and (as shown on picture). Verify that it locks.



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- Place the battery pack in its compartment. Close
- the battery compartment trapdoor.

➤ **Battery compartment**



### 4\_5\_3 Charging the battery

- When does the battery need to be charged?
  - On initial start-up, charge the battery for 4 hours under the environmental conditions stated above
  - When used with a terminal power supply : connect the power supply to Link/2500 USB C connector.

- How does the battery need to be charged?
  - The environment in which the charge takes place influences battery lifetime and autonomy (number of transactions)  
The optimal conditions are as follows :
    - Charging away from any external heat source (radiator, sun, enclosed area...)
    - The optimal temperature is between +15°C and +25°C

- How can the battery be charged? Using the terminal power supply

- Connect the terminal power supply unit to the terminal type C connector located on the right side of the terminal.  
Connect the power supply unit to the power supply mains network
- **Check to see if the battery symbol is flashing or moving(=battery charging)**
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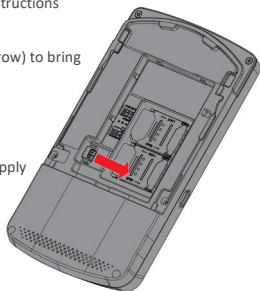


## 4\_5\_4 Changing the battery (except Integration version)



It is imperative to use a battery authorized by Ingenico. There is danger of explosion if battery used is not approved by Ingenico.

- Turn it off by pressing simultaneously  and  (yellow key) for about one second
- Remove the battery trapdoor (see section 4.5.2 “installing battery”) ➤ Lift the battery and remove it from its compartment
- Carefully disconnect battery, following the instructions below.
- Extract the connector by pulling it slightly (arrow) to bring it away from the terminal housing.
- Inform the terminal that battery will be replaced (\*). Do not start the terminal or connecting terminal power supply without battery.
- Connect and install the new battery by following the instructions in section 4.5.2 “Installing battery”
- Close the battery trapdoor and charge the new battery. See section “Charging the Battery»
- In order to preserve the environment, dispose used battery in compliance with current country recycling legislation.



(\* )The terminal memorizes that there is no battery simply by powering up. It will then correctly perform-full recharge with the next battery.



The battery disconnection must be exceptional. Battery connector durability: up to 30 mating cycles

# 5\_ Recommendations

## 5\_1 Safety

### Powering down the Link/2500 :

Disconnect the Link/2500 power supply block adapter from the electrical mains network.

### Lithium cell

The Link/2500 is fitted with an internal lithium cell which can only be accessed by a qualified technician.

### Battery

Link/2500 is fitted with battery specially designed for this terminal.

- Only use the appropriate chargers and batteries listed in the Ingenico's catalogue.
- Do not short-circuit the battery.
- Do not attempt to open the battery container.
- Used batteries must be disposed of at the appropriated sites.



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### WARNING

There is a risk of explosion if the battery is incorrectly replaced or is placed in a fire.

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### SIM1(SAM1)/SIM2(SAM2) readers' compartment

The trapdoor for battery, SIM1(SAM1)/SIM2(SAM2), readers located underneath the terminal, must be in place during the normal operation of the terminal. See sections «Removal of SAM1/ SAM2/SIM, modules» as well as «Connecting the battery».

### On airplanes

Your handset must be switched off by removing the battery pack. Remove the battery from the terminal when on an airplane.

Non-compliance with these safety rules may result in legal action and/or a ban on later access to cellular network services.

### Explosion areas

Certain regulations restrict the use of radio equipment in chemical plants, fuel depots and any site where blasting is carried out. You are urged to comply with these regulations. The terminal shall be protected by a specially fitted and certified cover enabling use in proximity to a fuel pump.

### Electronic health appliances

Your handset is a radio transmitter which may interfere with health appliances, such as hearing aids, pacemaker, hospital equipment, etc. Your doctor or the equipment manufacturer will be able to provide you with appropriate advice.

### FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter

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## Link/2500 I CL and Link/2500 CL/WiFi Frequency bands

(Note:Link/2500 I CL does not support Wi-Fi)

<b>Transmitter Frequency :</b>	<b>Wi-Fi (option):</b> 2412-2462MHz,5150-5250MHz, 5250-5350MHz, 5470-5725MHz,5725-5850MHz  <b>NFC :</b> 13.56MHz
<b>Receiver Frequency :</b>	<b>Wi-Fi (option) :</b> 2412-2462MHz, 5150-5250MHz, 5250-5350MHz, 5470-5725MHz ,5725-5850MHz  <b>NFC :</b> 13.56MHz
<b>RF-Output Power :</b>	<b>Wi-Fi (option):</b> 2.4G WIFI:13.38dBm  5G (5150-5250MHz):10.85dBm  5G (5250-5350MHz):10.60dBm  5G (5470-5725MHz):11.65dBm  5G (5725-5850MHz):10.84dBm

## 5\_2 Security of your terminal

Your device fulfils current applicable PCI PTS security requirements. Upon receipt of your terminal you should check for signs of tampering of the equipment. It is strongly advised that these checks are performed regularly after receipt. You should check, for example: that the keypad is firmly in place; that there is no evidence of unusual wires that have been connected to any ports on your terminal or associated equipment, the chip card reader or any other part of your terminal. Such checks would provide warning of any unauthorised modifications to your terminal, and other suspicious behaviour of individuals that have access to your terminal. Your terminal detects any “tampered state”. In this state the terminal will repeatedly flash the message “Alert Irruption!” and further use of the terminal will not be possible. If you observe the “Alert Irruption!” message, you should contact the terminal helpdesk immediately. You are strongly advised to ensure that privileged access to your terminal is only granted to staff that have been independently verified as being trustworthy.

The terminal must never be put in or left at a location where it could be stolen or replaced by another device.



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### CAUTION

Positioning of the terminal on check stand must be in such a way to make cardholder PIN (Personal Identification Number) spying infeasible. Positioning of in-store security cameras such way that the PIN-entry keypad is not visible.

NEVER ask the customer to divulge their PIN Code. Customers should be advised to ensure that they are not being overlooked when entering their PIN Code.

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## 6\_Environment (WEEE, Batteries and Packaging)

This product is labeled in accordance with European Directives 2012/19/UE concerning Waste Electrical and Electronic Equipment (WEEE) and 2006/66/EC concerning Batteries and Accumulators. Those provisions are requiring producers and manufacturers to become liable for take-back, treatment and recycling upon end of life of equipment and batteries.



The associated symbol means that WEEE and waste batteries must not be thrown away but collected separately and recycled.

Ensures that efficient collection and recycling schemes are set-up for WEEE according to the local regulation of your country. Please contact your retailers for more detailed information about the compliance solution in place for disposing of your old product and used batteries.

Packaging waste must also be collected separately to assure a proper disposal and recycling.

Please note that proper recycling of the electrical and electronic equipment and waste batteries will ensure safety of human health and environment.

## 7\_FCC/ISED Compliance

### 7\_1 Federal Communications Commission (FCC) Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

#### 15.21

**CAUTION** : This equipment may not be modified, altered, or changed in any way without signed written permission from "INGENICO". Unauthorized modification may void the equipment authorization from the FCC and will void the "INGENICO" warranty.

### 15.105(b)

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.

### 15.19 (a) (3)

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 of the device.

## 7\_2 ISED RSS Warning / ISED RF Exposure Statement

### ISED RSS Warning:

This device complies with ISED 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.

**ISED RF exposure statement:**

Le présent appareil est conforme aux CNR d'ISED 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.

Les opérations dans la bande de 5,15 à 5,35 GHz sont limitées à un usage intérieur seulement.

Operations in the 5.15-5.35 GHz band are restricted to indoor usage only.

SAR tests are conducted in standard operating positions accepted by the FCC/Canada ISED with the device transmitting at its highest certified power level in all tested frequency bands, although the SAR is determined at the highest certified power level, the actual SAR level of the product while operating can be well below the maximum value.

Before a new device is available for sale to the public, it must be tested and certified to the FCC /Canada ISED that it does not exceed the exposure limit established by the FCC/Canada ISED.

Tests for each Device are performed in positions and locations as required by the FCC /Canada ISED.

For body operation, the device has been tested and meets the FCC/ISED RF exposure guidelines.

Non-compliance with the above restrictions may result in violation of RF exposure guidelines.

Les tests SAR sont effectués à l'aide d'un emplacement d'exploitation standard reconnu par la FCC / isedc et l'équipement transmet à son niveau de puissance certifié le plus élevé dans toutes les bandes de fréquences testées, bien que le SAR soit déterminé au niveau de puissance certifié le plus élevé.

Le niveau de SAR pendant le fonctionnement de l'appareil peut être bien inférieur au maximum. Avant de vendre un nouveau produit au public, il doit être testé et démontrer à FCC / isedc qu'il ne dépasse pas les limites d'exposition spécifiées par FCC / isedc, chaque appareil étant testé à l'endroit et à l'endroit requis par FCC / isedc.

Pour le fonctionnement du corps, l'appareil a été testé pour être conforme aux directives FCC / isedc sur l'exposition aux RF lorsqu'il est utilisé avec les accessoires spécifiés pour ce produit.

## 8\_Marking



The CE marking is the manufacturer's declaration that the product meets the requirements of the applicable EC directives. The CE mark is a mandatory conformity marking for certain products sold within the European Economic Area (EEA).



Waste of Electrical and Electronic Equipment (WEEE) symbol indicates that when the end-user wishes to discard this product, it must be sent to separate collection facilities for recovery and recycling. By separating this product from other household-type waste, the volume of waste sent to incinerators or land-fills will be reduced and natural resources will thus be conserved.



Power charge symbol



USB symbol

## 9\_Troubleshooting

The terminal does not turn on

- Check the battery (is it discharged, is it connected?)  
*A full discharged battery can take long charging time to recover*
- Connect terminal to terminal power supply

Cards are not read

- Check that the magnetic card is swiped correctly (with magnetic band on terminal side).
- Swipe again the card with the magnetic stripe movement constant and rapid
- Verify that the magnetic strip is not damaged, grooved or cracked
- Make sure you have inserted correctly the smart card into the smart card reader and removed the card only after the transaction is performed.



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## Your contact



[www.ingenico.com](http://www.ingenico.com)

28-32, boulevard de Grenelle, 75015 Paris - France / (T) +33 (0)1 58 01 80 00 / (F) +33 (0)1 58 01 91 35  
Ingenico - SA au capital de 47 656 332 / 317 218 758 RCS Nanterre

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