



uniCenta oPOS

Hardware Installation Guide

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This Hardware Installation Guide deals with the setup and configuration of uniCenta oPOS after installation. It is a “How to” of key points for Security, Stock and Receipts to enable a quick customization to suit the users operation.

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General Hardware Configuration

This guide provides an easy way to understand how to configure hardware in uniCenta oPOS version 2.30 and higher.

Configuration panel

To set up any hardware in UniCenta oPOS you need to go to *System -> Configuration*. In the section *Cash register* you configure the parameters of the hardware connected to the terminal. All of these options are stored in local and each machine stores its own system configuration.

Cash register	
Name	<input type="text" value="por0825"/>
Skin	<input type="text" value="Metal"/>
Screen	<input type="text" value="window"/>
Tickets	<input type="text" value="restaurant"/>
Customer display	<input type="text" value="screen"/>
Printer	<input type="text" value="screen"/>
Printer 2	<input type="text" value="Not defined"/>
Printer 3	<input type="text" value="Not defined"/>
Scale	<input type="text" value="Not defined"/>
Scanner	<input type="text" value="Not defined"/>
Reports printer	<input type="text" value="tsp650"/> <input type="checkbox"/> Receipt printer

UniCenta oPOS configuration

The properties related to the register cash panel are:

Name	is the name of the POS terminal to identify operations from other POS terminals
Skin	provides a list of available themes which change the look and feel of uniCenta oPOS
Screen	sets if the application should be in a full screen or just in Window mode
Tickets	working mode of uniCenta oPOS. Standard (default mode) - allows multiple transactions (receipts) across a network of POS terminals and which can be opened or closed in any order by a POS terminal. Simple - allows only one transaction (receipt) at a time and only one POS terminal. If a new receipt is required the current transaction must be closed. Also, if this mode is used on a network of POS terminals transactions (receipts) cannot be shared. Restaurant allows receipts to be assigned to tables. Transactions are started by selecting a table from a graphical table plan before entry in the Sales panel. It shows a panel with the plants of the restaurant with all the tables and receipts opened. It also includes a module to manage reservations
Customer Display	output device of current transaction (receipt) such as: last ordered item, prices and total amount
Printer	the main receipt printer
Printer2	an additional printer that could print i.e. an order to a kitchen printer or a bar printer
Printer3	as Printer2
Scale	receive data from weighing scales
Scanner	sets a barcode scanner to read product barcodes, customer and user identification cards
Reports Printer	the system printer used to print uniCenta oPOS management reports

Touch screen

Touch screens simulate a mouse. When a user touches the screen the system receives a mouse click event at the point the user touches. There is nothing to configure in uniCenta oPOS for Touch screens.

The most common screen size for POS terminals is 15" which usually have a minimum 1024x768pixels resolution. However, uniCenta oPOS is capable of running on 10.4" screens successfully with an 800x600pixels resolution such as the Partner Tech PT-6200. *Most popular touch screen systems today are developed by ELO TouchSystems and are very well supported in Windows and Linux.*

To test just press the touch screen and see how the mouse moves and clicks.

Barcode scanner

Barcode scanners simulate a keyboard. When a barcode scanner reads a barcode, it treats the barcode just as a keyboard would do. There is nothing to configure in uniCenta oPOS.

Most popular barcode readers are provided by Metrologic, like Metrologic 9520 Voyager.

To test the barcode scanner just open a text editor and scan a barcode. The value from the barcode should be displayed in the text editor.

Receipt printer and cash drawer

uniCenta oPOS supports several receipt printers connected to the same terminal and you can configure up to 3 receipt printers in the configuration panel. Cash drawers can be connected to the receipt printer and open with a printer command.

The supported printer modes are:

Printer

This mode is for receipt printers and standard printers installed as a *printer* in the operating system using the system driver provided by the manufacturer of the printer.

When you select this mode a drop-down list to select the printer and a check box to select the paper type will appear.

Printer	printer	TSP143-(STR_T-001)	<input checked="" type="checkbox"/> Receipt printer
Printer 2	Not defined	(Default)	
Printer 3	Not defined	(Show dialog)	
Scale	Not defined	Kyocera PDF	
Scanner	Not defined	Photosmart-C3100-series	
		TSP143-(STR_T-001)	

Printer selection.

In the drop down list if you select *(Default)* the default system printer will be selected and if you select *(Show dialog)*, every time uniCenta oPOS wants to print a receipt or a document, a dialog will appear where you can then select the printer to use.

The check box sets the paper type. If the check box is ticked the *receipt* paper type will be used. If un-ticked the paper type "standard" is used. The *receipt* paper type is for receipt type printers and the *standard* paper type is for A4 paper size commonly used in standard printers.

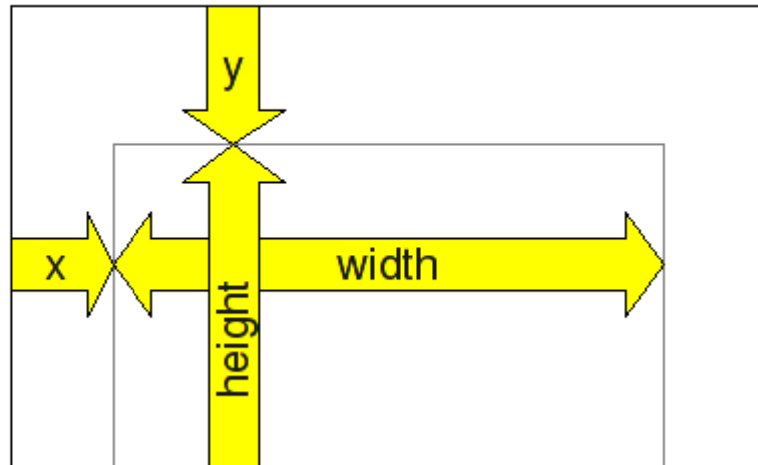
Some advanced configuration can be done to adjust the paper size used in your printer. To configure the parameters of the chosen paper size; open the file *unicentaopos.properties* file and look for the following settings:

```
paper.receipt.x  
paper.receipt.y  
paper.receipt.width  
paper.receipt.height  
paper.receipt.mediasize
```

The property *mediasize* stands for the paper size name to use and can be one of the followings:

```
Postcard, Statement, Letter, Executive, Legal  
A0, A1, A2, A3, A4, A5, A6, A7, A8, A9, A10  
B0, B1, B2, B3, B4, B5, B6, B7, B8, B9, B10  
ISOB0, ISOB1, ISOB2, ISOB3, ISOB4, ISOB5, ISOB6, ISOB7, ISOB8, ISOB9, ISOB10  
EnvISOB0, EnvISOB1, EnvISOB2, EnvISOB3, EnvISOB4, EnvISOB5, EnvISOB6,  
EnvISOB7, EnvISOB8, EnvISOB9, EnvISOB10  
C0, C1, C2, C3, C4, C5, C6  
EnvPersonal, EnvMonarch, Monarch, Env9, Env10, Env11, Env15, c8x10  
EnvDL, DL, EnvC0, EnvC1, EnvC2, EnvC3, EnvC4, EnvC5, EnvC6
```

The the properties *x*, *y*, *width* and *height* stands for the drawable area of the paper used. The units are defined in 1/72nds of an inch.



Drawable area

The default properties values for receipt printers are for *Star Micronics* receipt printers and are the following:

```
paper.receipt.x=10
paper.receipt.y=287
paper.receipt.width=190
paper.receipt.height=546
paper.receipt.mediasize=A4
```

If you have an *Epson* receipt printer modify the default values by the following:

```
paper.receipt.x=10
paper.receipt.y=10
paper.receipt.width=190
paper.receipt.height=546
paper.receipt.mediasize=A4
```

For standard printers the default properties values are defined for the A4 paper size and are the following:

```
paper.standard.x=72
paper.standard.y=72
paper.standard.width=451
paper.standard.height=698
paper.standard.mediasize=A4
```

If you have another receipt printer or you want to set another paper size for your printer you will need to modify these values.

javapos

This mode is for receipt printer and cash drawers with a javapos driver installed. javapos drivers are provided by the manufacturer of the receipt printer and the cash drawer and you have to install it following the manufacturer instructions.

When you select this mode two text boxes appear. The first box is for the javapos printer name defined when installed the driver and the second box is for the cash drawer name.

Printer	<input type="text" value="javapos"/>	Printer name	<input type="text" value="printer-id"/>	Drawer name	<input type="text" value="drawer-id"/>
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Javapos name selection.

Epson, Tmu220, Star, Ithaca, Surepos

These modes are for different dialects of ESC/POS receipt printers connected to the machine using a serial port, a parallel port or any other kind of device port (like USB) that can be configured as a device file. For example several receipt printers manufacturers provide a system module for Linux that creates a device file like `/dev/ttyUSB0` when the receipt printer is connected to an USB port.

Do not install any driver, because uniCenta oPOS connects directly to the printer. If a serial connection is chosen, the configuration must be: bauds: 9600, data bits 8, stop bits 1 and parity none.

For example to test the printer is properly connected to the first serial port type:
in Windows

```
type test > COM1:
```

The Epson type is the most ESC/POS compatible protocol, but you must be sure to configure the printer to ESC/POS mode.

Two modes are available *serial* for serial and parallel ports and *file* for serial, parallel and other ports.

The last box is for the device port the receipt printer is connected. In Windows take care that if the first serial port is selected you have to put *COM1* for *serial* mode and *COM1:* (with the two dots) for *file* mode.

Printer	epson	Mode	serial	Port	/dev/ttyS0
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Epson configuration.

Screen

Use this setting to display an on-screen receipt when carrying out modifications to the receipt design. This mode creates images of the receipts that are displayed in the menu option *Printer* under *System*.

Customer Display

uniCenta oPOS supports text Customer Displays of 2 lines and 20 columns. The recommended customer display is the Epson DM 110 or compatible with a serial or a parallel interface.

The supported Customer Displays are:

Window

A new window is created and is used as a customer display. Useful if you have two monitors.

javapos

A customer display with a javapos driver installed. To install it follow the provider instructions and configure the ID of the customer display in uniCenta oPOS.

Epson, Ld200, Surepos

Like receipt printers these modes are for different versions of the ESC/POS protocols used in Customer Displays connected to the machine using a serial port, a parallel port or other kind of device port (like USB) that can be configured as a device file. For example several receipt printers manufacturers provide a system module for Linux that creates a device file like `/dev/ttyUSB0` when the receipt printer is connected to an USB port

The Customer Display and a receipt printer can be connected in bridged mode where; the Customer Display is directly connected to the computer and the receipt printer is connected to the Customer Display. In this case both share the configuration using the same port.

Do not install any drivers because uniCenta oPOS connects directly to the printer.

If a serial connection is chosen, the configuration settings must be: 9600, data bits 8, stop bits 1 and parity: none.

Screen

This is a Customer Display on a screen that can be used for configuration purposes. To see this Customer Display go to the menu option *Printer* under *System*.

Scale

uniCenta oPOS supports scales connected directly to a serial interface. Do not install any drivers because uniCenta oPOS connects directly to the scale.

The serial parameters used to connect to the scale must be: 4800, data bits: 8, stop bits: 1 and parity: odd

There are two protocols supported:

1. Samsung. The scale command code is `$`. The weight is returned in kilos.
2. Dialog1. The scale command code is `0x05`. The weight is returned in grams

If you want to sell products by weight but you do not own a scale you can use the screen scale. This option shows a dialog to enter the weight. The scale is used in the sales panel to introduce automatically the units of a product. Products that use the scale must be marked as *scale* in the properties tab of the Products panel.

Data collector

UniCenta oPOS supports a portable data collector: Scanpal 2 provided by Metrologic.

The Scanpal 2 connects to the terminal using a serial interface. The products catalog is uploaded to the Scanpal2 in the Products panel and the inventory of the Scanpal2 is downloaded in the Stock maintenance panel.

Report printer

A report printer is one which is installed using the operating system and all settings should be configured outside of uniCenta oPOS which will use the system driver provided by the printer manufacturer.

In the drop down list if you select *(Default)* the default system printer will be selected and if you select *(Show dialog)*, every time uniCenta oPOS wants to print a report, a dialog will appear where you can select the printer to use.