

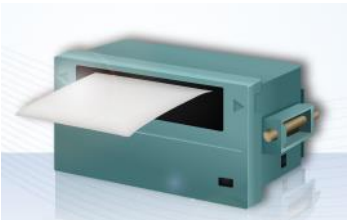


23. HMI Supported Printers

This chapter describes the printers supported by HMI and the setup steps.

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23.1. The Supported Printer Types

HMI supported printer drivers include the following types:

Printer type	Description
<ul style="list-style-type: none"> ● SP-M, D, E, F 	<p>Serial printers, please configure communication parameters to match the printer. [Pixels of width] must be correctly set and can't exceed printer default setting:</p> <p>100 pixels for 1610 series printers. 220 pixels for 2407, 4004 series printers.</p> <p>The driver uses EPSON ESC Protocol for Serial Micro Printer.</p>
<ul style="list-style-type: none"> ● EPSON ESC/P2 Series 	<p>Serial printers, please configure communication parameters to match the printer.</p> <p>The ESPON ESC/P2 printer protocol is used.</p> <p>Impact Printer: LQ-300, LQ-300+, LQ-300K+ (RS-232), LQ-300+II (RS-232) Inkjet Printer: Stylus Photo 750 Laser Printer: EPL-5800</p>
<ul style="list-style-type: none"> ● HP PCL Series (USB) 	<p>HP compatible USB printers that support HP PCL5 protocol or PostScript3 Printer Control Language.</p> <p>The printers that support PCL5 or later versions will support PCL5 protocol due to the downward compatibility of PCL.</p>

- **Axiohm A630**



Micro printer from France connects via serial port; please configure communication parameters to match the printer.

- **SPRT**



Serial printers, please configure communication parameters to match the printer. [Pixels of width] must be correctly set and can't exceed printer default setting "100".

- **EPSON TM-L90**



Serial printers, please configure communication parameters to match the printer. [Pixels of width] must be correctly set and can't exceed printer default setting "576".

- **EPSON TM-T70**



Serial printers, please configure communication parameters to match the printer. [Pixels of width] must be correctly set and can't exceed printer default setting "576".

The paper cutting mode can be selected: [No cut] / [Partial cut].

- **BRIGHTTEK WH-A19**



Supported models: A92R10-00E72A

72 in model number represents hexadecimal printer, and A represents wide voltage 5~9V. This is the same as the A6 16 impact printer.

- **BRIGHTTEK WH-E19**



Serial printers, please configure the same communication parameters as the printer.

- **BRIGHTTEK WH-E22**



Supported models:

E22R10-00E725: Same as A7 16 impact printer.

A7 represents A72R90-31E72A.

E221R90-00E11740GA: Serial printer, connects through RS-485 port, please use a RS232-to-RS485 converter.

- **BRIGHTTEK WH-C1/C2**



Serial printers, please configure communication parameters to match the printer. The paper cutting mode can be selected: [No cut] / [Half cut] / Full cut].

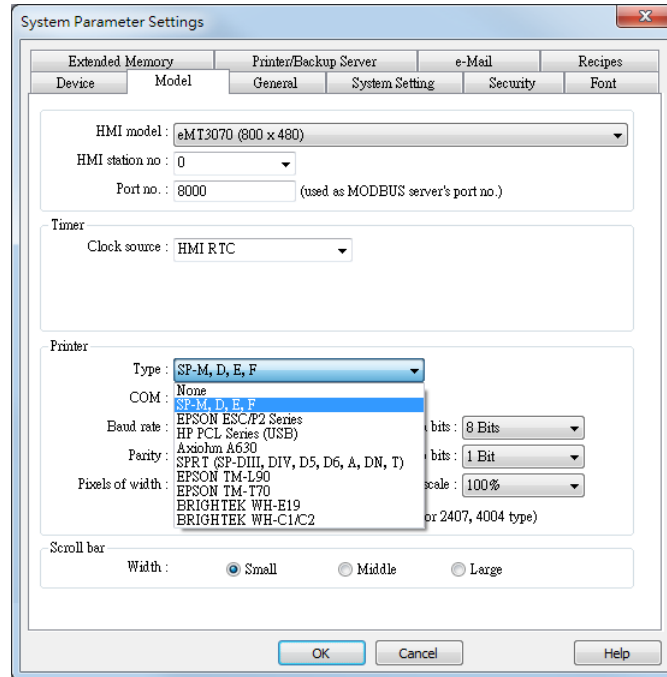
- **Remote Printer Server**



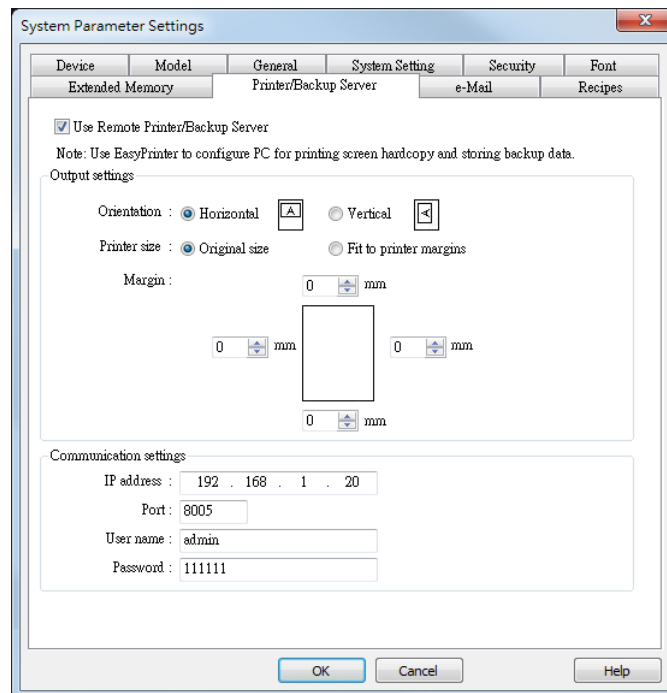
Use EasyPrinter to start printing by the printers connected with PC via Ethernet. This works under MS Windows so most printers on the market are supported.

23.2. Steps to Add a New Printer and Start Printing

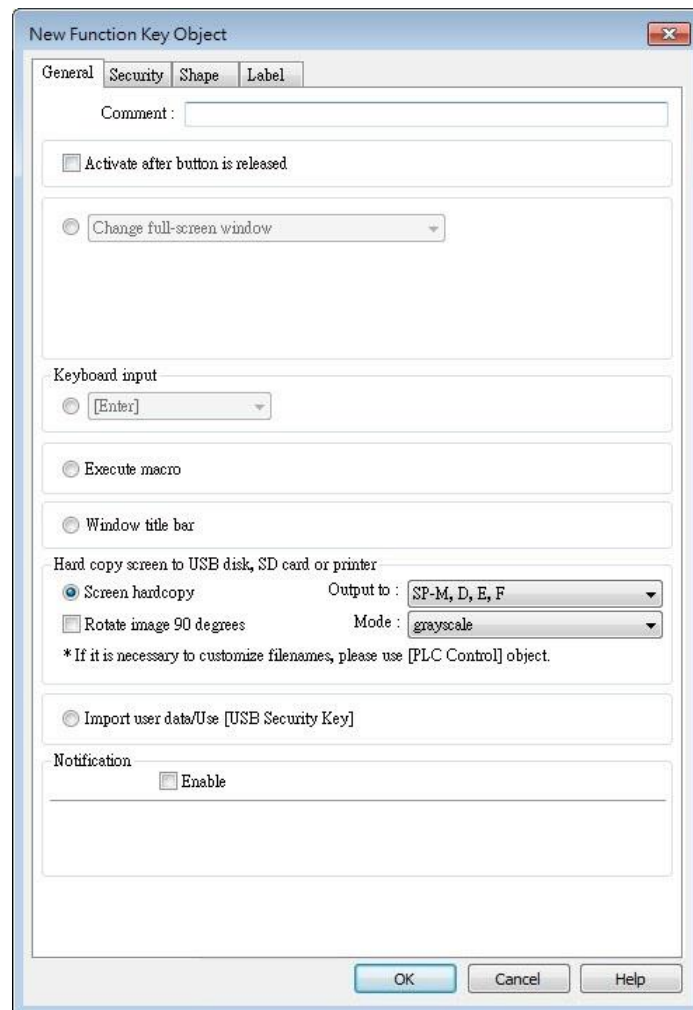
1. Add printer type.
 - In [System Parameter Settings] » [Model] select the printer type and set the relevant parameters.



- To connect Remote Printer Server, set the parameters in [System Parameter Settings] » [Printer/Backup Server].



2. Start printing.
 - Start printing with Function Key.



- Or, use PLC Control [Screen hardcopy] to start printing with a designated bit address.

PLC Control

Comment :

Device : Local HMI

Attribute

Type : Screen hardcopy

Active only when designated window opened

Rotate image 90 degrees

Trigger address

Device : Local HMI

Address : LB 0

Screen hardcopy

Trigger mode : OFF->ON

Source window

Current base window Window no. from register Designate window no.


Device : Local HMI

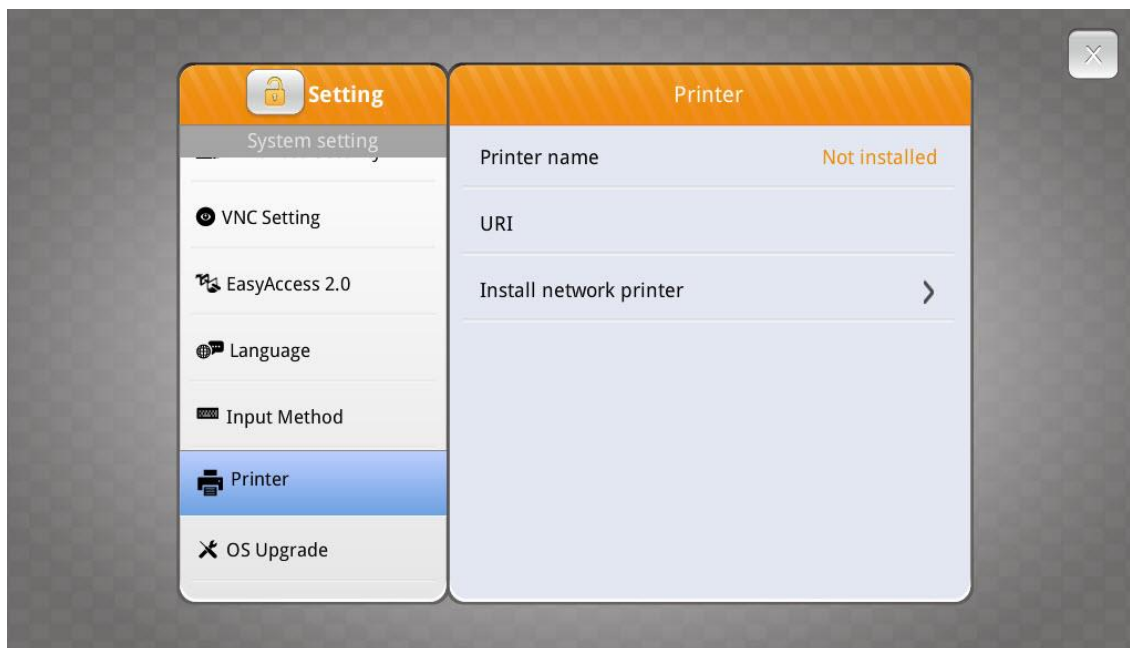
Address : LW 0 16-bit Unsigned

Output to : SP-M, D, E, F Mode : black and white

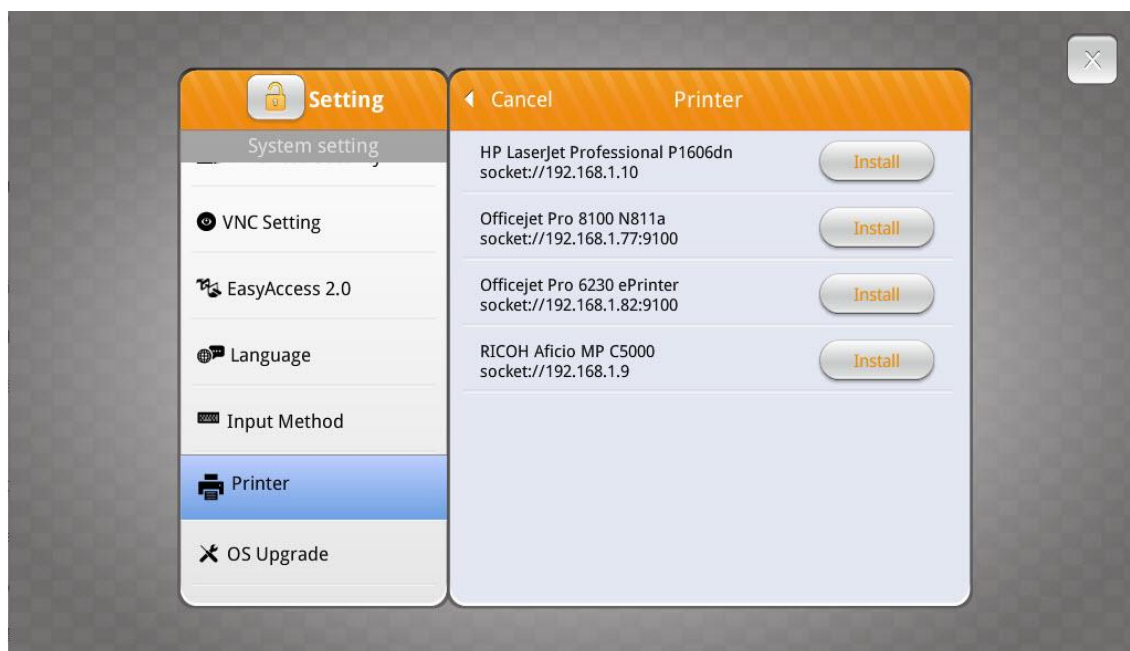
23.3. Installing Network Printer on cMT / cMT X HMI

Opening system setting on a cMT / cMT X Series model and selecting [Install network printer] can install more printers apart from the ones listed in the preceding chapters.

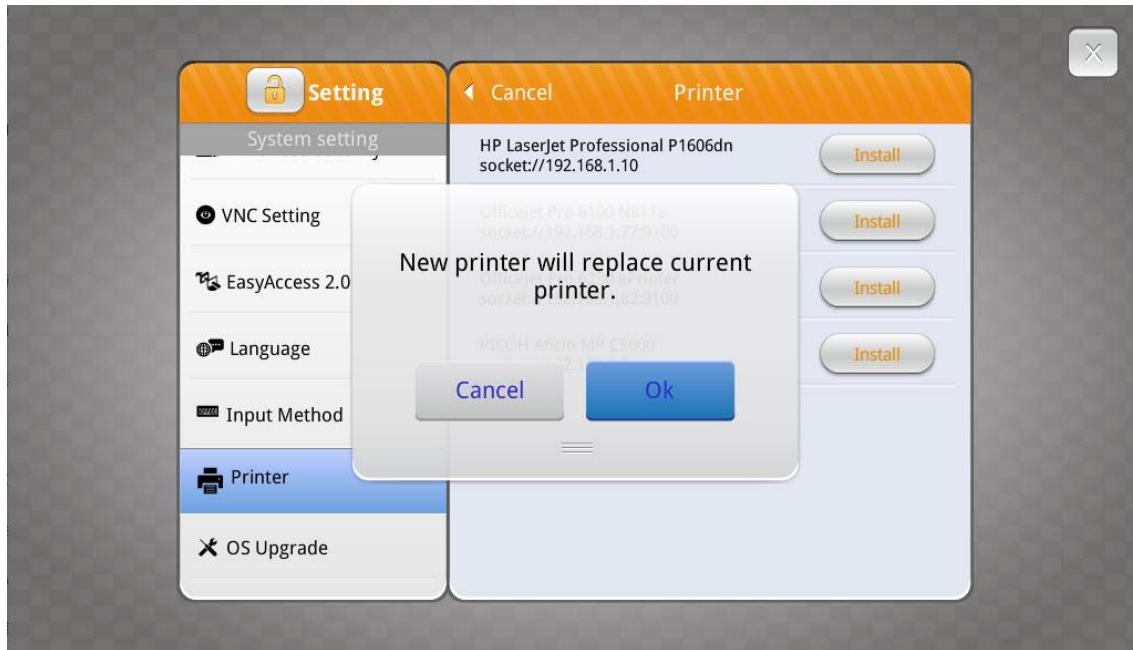
1. Tap  to open system setting and log in, find [Printer] » [Install network printer].



2. HMI needs a few seconds to search for the network printers on the same network.



3. Select a network printer and tap [Install] to install its driver. The new printer driver will replace the former one since only one printer can be installed at a time.

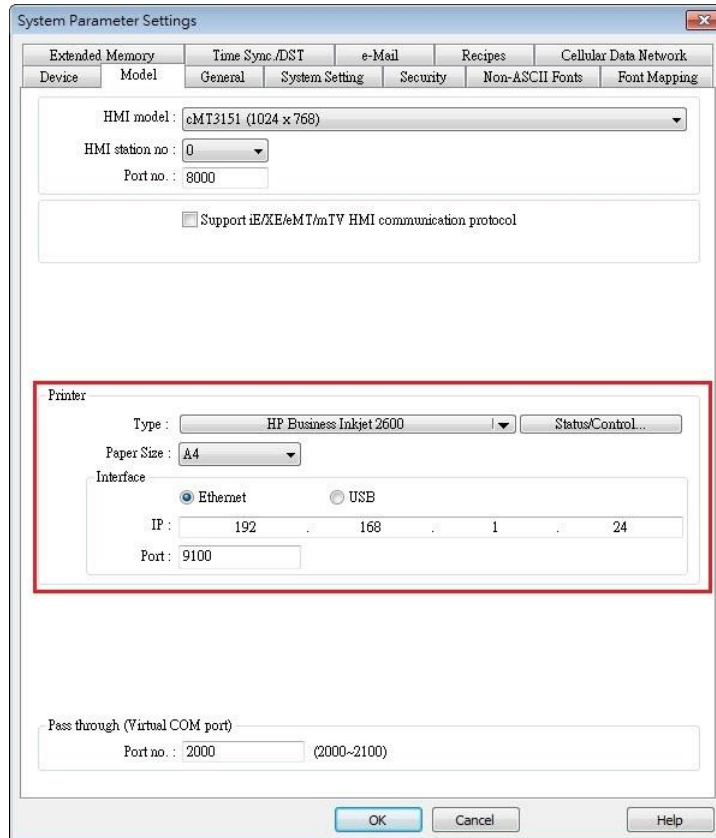


4. The network printer is ready for use after installation is completed.

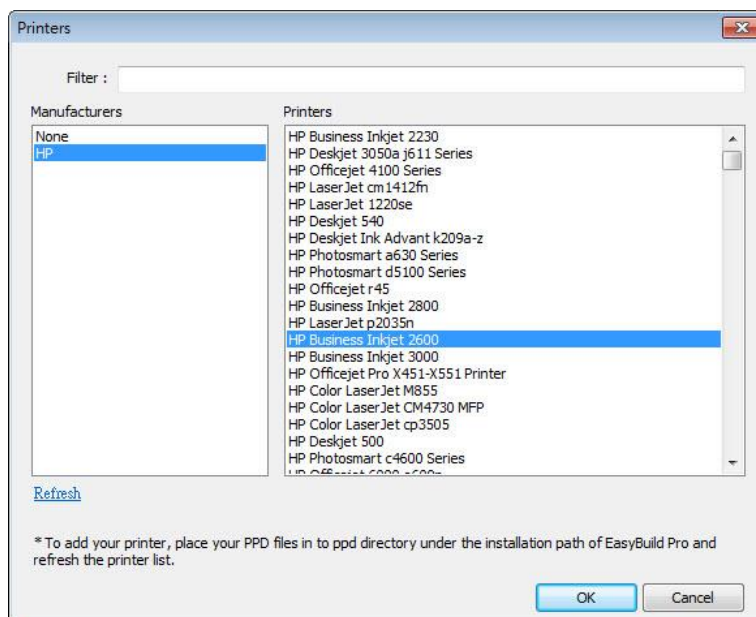
23.4. Installing PPD File on cMT / cMT X HMI

Installing the PPD file from a printer driver on a cMT / cMT X Series model is also possible.

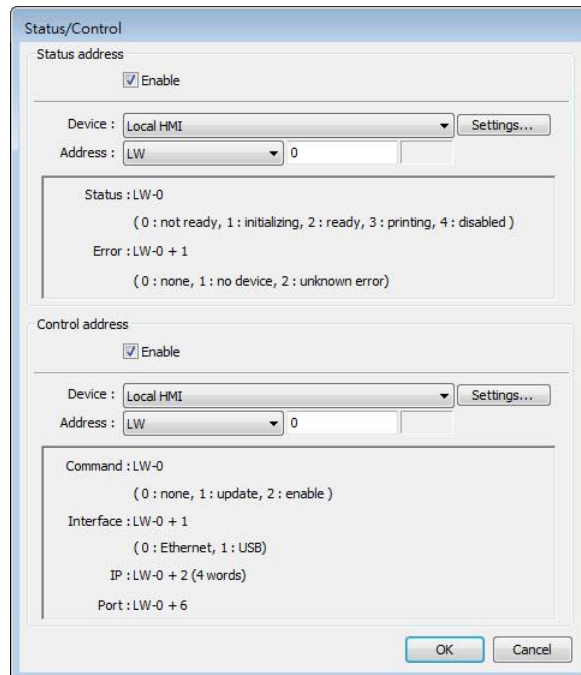
1. Go to [System Parameter Settings] » [Model] tab.



2. Select a printer type. To add a new printer, place the printer's PPD file in the ppd folder under EasyBuilder Pro installation directory, and then click [Refresh].

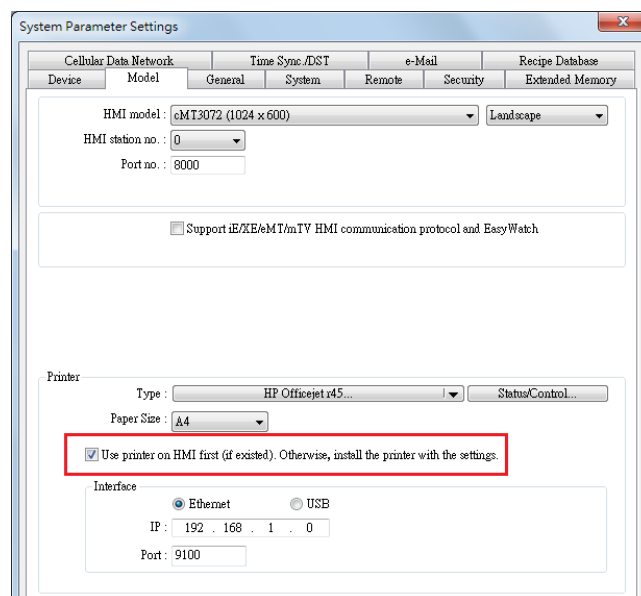


- Use Status Address to monitor printer status, and use Control Address to dynamically update connection parameters.



Note

- Installing PPD file is not supported on cMT-SVR and cMT Gateway models.
- HP printers are recommended since they may have better compatibility with cMT / cMT X models. Printers should be tested beforehand.
- Please install a printer on a cMT / cMT X Series model by using [Install network printer] in the system setting first; if this doesn't work, installing PPD file is the second option.
- To use the printer selected in the project file, please do not select [Use printer on HMI first (if existed)] option if a printer driver is already installed on HMI. By giving command 1: update in the control address, the printer selected in the project file will be used.



23.5. Using Printers on cMT X HMI via IPP Protocol

The cMT X Series supports printer usage via the Internet Printing Protocol (IPP). It's essential that the printer also supports the IPP protocol. For more information about the IPP protocol, please refer to the link:

https://en.wikipedia.org/wiki/Internet_Printing_Protocol

Typically, one can check whether a printer supports the IPP protocol in the printer's network settings. Taking an HP printer as an example, enabling Internet Printing Protocol (IPP) or Bonjour in the network settings is necessary, as shown below.

HP Officejet Pro 6230 ePrinter

Embedded Web Server

Home Web Services **Network** Tools Settings

NETWORK

- + General
- + Wired (802.3)
- + Wireless (802.11)
- + HP Wireless Direct
- + AirPrint™
- **Internet Printing Protocol**
 - Status
- + Advanced Settings

Internet Printing Protocol Status

Internet Printing Protocol (IPP) is an Internet-standard protocol that allows you to print documents and manage print jobs over the Internet.

If enabled, you can find out about this printer's capabilities, submit print jobs, and query the status of the printer or its jobs.

Disable IPP
 Enable IPP

Printer Location

Apply **Cancel**

HP LaserJet Professional P1606dn

HP LaserJet Professional P1606dn 192.168.1.10

Information Settings **Networking** HP Web Services HP Smart Install

- IPv4 Configuration
- IPv6 Configuration
- Advanced
- Bonjour**
- Password
- SNMP
- Network Summary

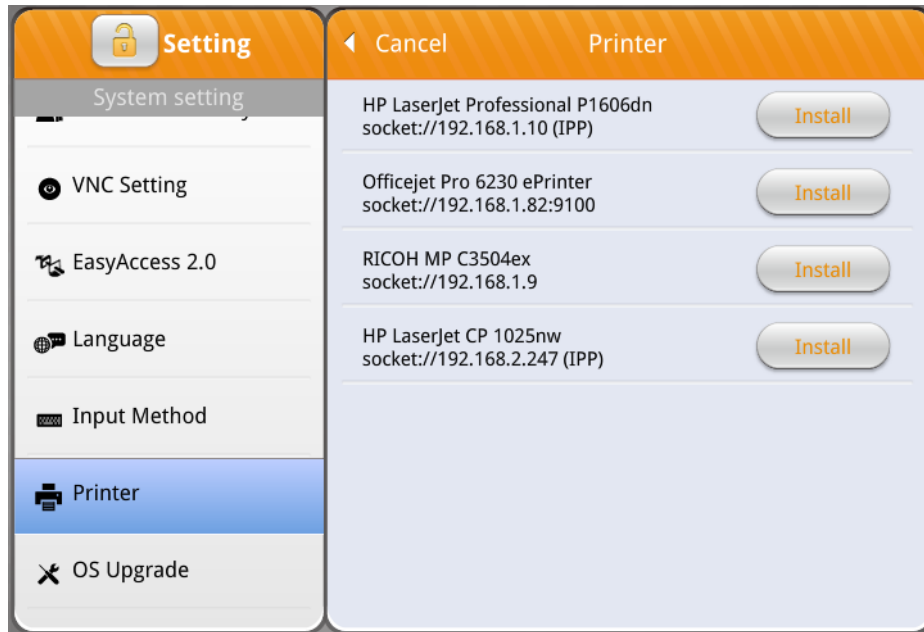
Bonjour

Enable Bonjour

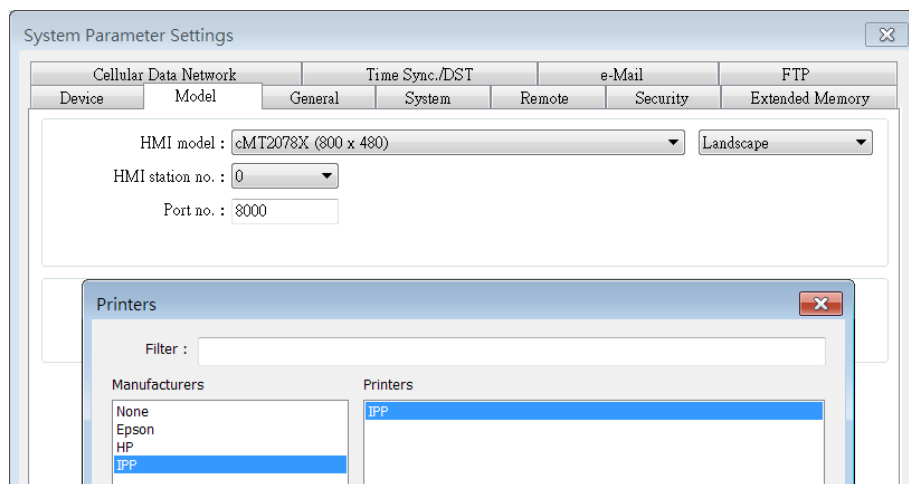
Bonjour Name:

Bonjour Domain Name:

After enabling these options, available printers for installation can be found through the "Install network printer" list in HMI system settings, where "(IPP)" indicates the use of this protocol for communication.



In EasyBuilder Pro, selecting IPP in the printer settings enables normal printing. Some cMT X HMIs may require manual addition of the IPP protocol. If this requirement arises, please consult a Weintek distributor.



23.6. CUPS Printing Support

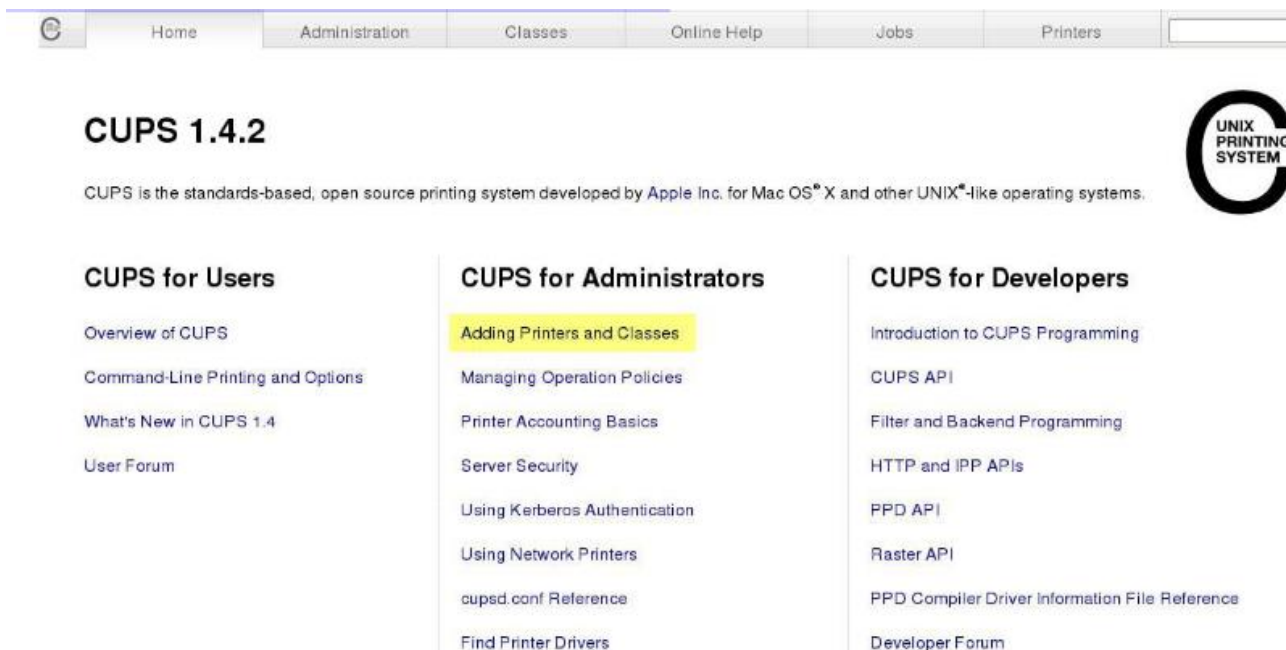
The cMT / cMT X Series model process print jobs by using CUPS; therefore, the printer installed on a cMT/cMT X Series model must support CUPS. For more information about CUPS, please visit <https://en.wikipedia.org/wiki/CUPS>.

Below are two ways to find out whether a printer supports CUPS:

- Check with your printer's manufacturer.
- Test your printer on a PC running Linux and install a PPD file by following these steps:
 1. Install CUPS on a Linux PC and make sure that CUPS is working properly. Enter

<http://localhost:631> in your browser.

2. Open the Home tab and select [Adding Printers and Classes].



CUPS 1.4.2

CUPS is the standards-based, open source printing system developed by Apple Inc. for Mac OS® X and other UNIX®-like operating systems.

CUPS for Users

- Overview of CUPS
- Command-Line Printing and Options
- What's New in CUPS 1.4
- User Forum

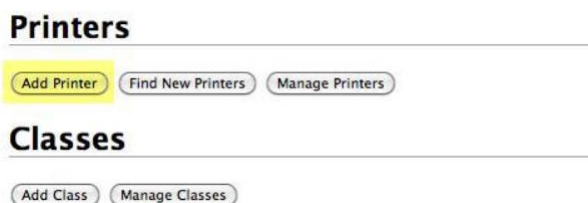
CUPS for Administrators

- Adding Printers and Classes**
- Managing Operation Policies
- Printer Accounting Basics
- Server Security
- Using Kerberos Authentication
- Using Network Printers
- cupsd.conf Reference
- Find Printer Drivers

CUPS for Developers

- Introduction to CUPS Programming
- CUPS API
- Filter and Backend Programming
- HTTP and IPP APIs
- PPD API
- Raster API
- PPD Compiler Driver Information File Reference
- Developer Forum

3. Select [Add Printer] under Printers.



Printers

[Add Printer](#) [Find New Printers](#) [Manage Printers](#)

Classes

[Add Class](#) [Manage Classes](#)

4. In the window that follows, select [AppSocket].

Add Printer

Add Printer

- Local Printers:**
- CUPS-BRF (Virtual Braille BRF Printer)
 - Serial Port #1
 - Serial Port #5
 - USB Serial Port #1
 - LPT #1
 - HP Printer (HPLIP)
 - HP Fax (HPLIP)
- Discovered Network Printers:**
- HP LaserJet CP 1025nw (Hewlett-Packard HP LaserJet CP 1025nw)
 - HP LaserJet Professional P1606dn (Hewlett-Packard HP LaserJet Professional P1606dn)
 - HP LaserJet Professional P1606dn (HP LaserJet Professional P1606dn)
 - RICOH MP C3504ex (RICOH MP C3504ex)
 - HP LaserJet CP 1025nw (HP LaserJet CP 1025nw)
 - Hewlett-Packard HP LaserJet CP 1025nw (driverless) (Hewlett-Packard HP LaserJet CP 1025nw (driverless))
 - Hewlett-Packard HP LaserJet Professional P1606dn (driverless) (Hewlett-Packard HP LaserJet Professional P1606dn (driverless))
- Other Network Printers:**
- Internet Printing Protocol (http)
 - Internet Printing Protocol (https)
 - Internet Printing Protocol (ipp)
 - Internet Printing Protocol (ipps)
 - Backend Error Handler
 - AppSocket/HP JetDirect
 - LPD/LPR Host or Printer
 - Windows Printer via SAMBA

5. Enter the printer's IP address, e.g. `socket://10.3.9.55:9100`.

Add Printer

Connection:

Examples:

```

http://hostname:631/ipp/
http://hostname:631/ipp/port1

ipp://hostname/ipp/
ipp://hostname/ipp/port1

lpd://hostname/queue

socket://hostname
socket://hostname:9100

```

See "[Network Printers](#)" for the correct URI to use.

[Continue](#)

6. Enter the printer's name.

Add Printer

Name: GK420D
 (May contain any printable characters ex

Description: Ethernet-10.3.9.55
 (Human-readable description such as "H

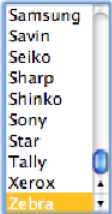
Location: LAB
 (Human-readable location such as "Lab :

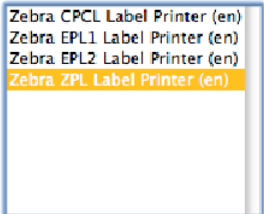
Connection: socket://10.3.9.55:9100

Sharing: Share This Printer

7. Select the printer's manufacturer and model name. If your printer does not exist in the list, you may ask the manufacturer which is the PPD file you can use for replacement.

Add Printer

Name: GK420D
Description: Ethernet-10.3.9.55
Location: LAB
Connection: socket://10.3.9.55:9100
Sharing: Do Not Share This Printer
Make: 

Name: GK420D
Description: Ethernet-10.3.9.55
Location: LAB
Connection: socket://10.3.9.55:9100
Sharing: Do Not Share This Printer
Make: Zebra
Model: 

Or Provide a PPD File: no file selected

8. After adding the printer, find its PPD file in /etc/cups/ppd in Linux, import the PPD file to EasyBuilder Pro (see 23.4 in this chapter), and then download the project to HMI.
9. If this doesn't work, please contact your nearest Weintek distributor.