Network Print Server User Manual

(2021-03 Version)





1 Summary
1.1 Product Main Features2
1.2 Product Description
1.3 Product Series
2 Technical Specifications
2.1 Technical Parameters
3 Interfaces Instruction
4 Network Configuration Instructions
4.1 Configuration Tool Preparation5
4.2 Configuration Tool File Description5
4.3 Preparation Before Using
4.4 Set the Ethernet IP Address of the Print Server
4.5 Query Current Status
4.6 WiFi Parameter Configuration11
4.7 Print Server Port
5 WINDOWS Printer Driver Installation Example
5.1 Install the Printer Driver
5.2 Configure the Printer Port

1 Summary

1.1 Product Main Features

Standard 100M network interface

Small Size: 53x53x40mm

Default Configuration: RJ-45 LAN Port, WiFi/Bluetooth version is available

Communication Method: USB 2.0 interface.

Support Multi-users sharing one printer of a wireless network simultaneously.



^{-secu} Simple and compact design, low power, small footprint, easy to carry. Can print directly from operating the mobile phone (work with PrinterShare or Printhand APP), support to print files, photos directly via APP.

1.2 Product Description

LY-MPS-N01 is a **Mini USB Print Server**, a 10/100Mbps Ethernet to USB 2.0 Network LPR Print Server, after connected to the local area network (LAN) through the RJ45 network cable, it is an independent network device in LAN, which allows multiple computers in the local area network to share a USB printer. It's replacing the computers which worked as the print server with the high cost, spacy-occupying, high energy consuming, not easy to manage later disadvantages. Allowing users to use mobile phones, tablets, computers or other devices to print files.

1.3 Product Series

Loyalty-Secu Network print servers with 3 versions for option:

Model	Communication Method	Remarks	
LY-MPS-N01	Ethernet RJ45 LAN Port		
LY-MPS-BN01	Ethernet &Bluetooth4.0	Support Android/IOS (BLE)	
		RJ45 LAN Port+ Bluetooth	
LY-MPS-WN01	Ethernet &WiFi	RJ45 LAN Port+ WiFi	

2 Technical Specifications

2.1 Technical Parameters

Product Parameters				
CPU	ARM9			
RAM	64MB DDR2			

Shenzhen Loyalty-Secu Technology Co., LTD

FLASH	128MB NANDFLASH
USB Printer Interface	USB2.0 HOST
USB Configuration Port	USB2.0 DEVICE
Network Port	10/100M
Bluetooth Interface	Classic Bluetooth +BLE (Bluetooth 4.0) optional
WiFi Interface	802.11BGN optional
Power Supply	DC 5V/1A
Product Dimension	53×53×40mm
Product Weight	25g
Packing Size	13.5×13.5×5CM
Packing Weight	160g
Operating Environment	Temperature -10°C~50°C Humidity 20%~85%
Storage Environment	Temperature -10°C~50°C Humidity 20%~85%

3 Interfaces Instruction





4 Network Configuration Instruction

4.1 Configuration Tool Preparation

Please download the configuration tool from Loyalty-Secu official website: <u>https://www.loyalty-secutech.com/download</u> or contact our customer service to obtain the configuration tool of the print server.

4.2 Configuration Tool File Description

The compression file package will be shown as below after decompression:

Name	Туре	Compressed size	Password
🔄 config	Configuration settings	1 KB	No
🔄 language_main	Configuration settings	1 KB	No
Fint Server Config Tool	Application	3,932 KB	No

Double-click [**Print Server Config Tool.exe**] to configure the parameters, it's no need any software installation process, the interface will be as **Image 1** shows:

vice List	Config Parameter	Firmware update		
evice netw	ork parameter settin	9		
Use DH	ICP to obtain an IP a	ddress from the network		
IP	Addr:	0	Sateway:	
Subnet	mask:		DNS:	Apply
7 <i>E</i> 41	duct is equipped with	WIFI function, you can	WIFI con	figuration wizard
If the proc				
If the proc				

Image 1

4.3 Preparation Before Using

- A. A computer with WINDOWS operating system
- B. A USB cable with TYPE C interface (Included in the packing box)
- C. Print Server Config Tool (WINDOWS version)

Connect the print server to the computer via the USB cable, as the Image 2 shows:

Parameter Configuration



Image 2

After connected to the computer, the print server will automatically power on and start. The entire startup process takes about 20 seconds, then the print server config tool will display USB sign in the lower left corner, indicating that the config tool has been identified the print server as **Image 3** shows:

	中文 ENG
	-IM
Device List Config Parameter Firmware update	
Device network parameter setting Use DHCP to obtain an IP address from the network	
IP Addr: Gateway: Subnet mask: DNS:	Apply
If the product is equipped with WIFI function, you can	WIFI configuration wizard



Image 3

After configuring the corresponding parameters, remove the USB cable between the print server and the computer. Starts the connection between several devices as **Image 4** shows:





4.4 Set the Ethernet IP Address of the Print Server

Two ways for the print server to obtain the IP Address:

Method 1: Use DHCP to obtain an IP address from the network

Method 2: Obtain an fixed IP Address

The advantage of the method 1 is very simple and time saving, however, the disadvantage is that it is easy to forget the IP address and may assign a different IP address for the print server, brings the IP Address conflict problem.

For method 2, can assign a fixed IP address to the print server according to the current network environment, this method is more reliable and stable((highly recommended)), the users need to know their own network attributes.

% Tips for how to get an fixed IP Address %

Click "Start Menu---Run", or use the WIN+R key combination to call the run window, enter "cmd" in the run window, click OK (As Image 5 Shows).



🖅 Run		×
	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.	
Open:	cmd ×	/
	OK Cancel Browse	



After inputting "**ipconfig**", click "**Enter**" button, then the IP Address, Subnet Mask, Gateway information will be displayed as **Image 6** shows:



Image 6

Network Segment: 192.168.0.xxx Subnet Mask :255.255.255.0 Default Gateway: 192.168.0.1



Open the config tool and select the "Config Parameter" tab

A: If you use DHCP to obtain an IP address

Please check "Use DHCP to obtain an IP address from the network" as shown in the Image 7:

Print Server	Config Too	ganée.		-	
					AR.
Device List Conf	fig Parameter	Firmware update			-
Device network pa	rameter setting			CP	
Use DHCP to	obtain an IP ac	idress from the network	Use DH	CP	
IP Addr			iateway:		
Subnet mask:			DNS:		Apply
If the product is	equipped with	WIFI function, you can	WIFI	configuration wizard	
/					
				01	Click here
USB					

Image 7

Click the "Apply" button, restart the print server, the print server will work successfully.

B: Assign a fixed address

Uncheck "Use DHCP to obtain an IP address from the network" and enter fixed network parameters in the config menu. Different network environments will have different parameters. Please obtain the corresponding information based on the actual internet situation, as Image 8 shows:

printer serve	r config tool			-
				A MARINE AND A MARINE
Device List Cont	ig Parameter Firmware u	pdate		
Device network pa	rameter setting			
Use DHCP to	obtain an IP address from t	ne network		
IP Addr:	192.168.0.115	Gateway:	192.168.0.1	
Subnet mask:	255.255.255.0	DNS:	192.168.0.1	Apply
If the product is	equipped with WIFI function	n, you can	WIFI configuration	n wizard
		ά.t		

Image 8

4.5 Query Current Status

On the "Device List" page, all the print servers will be listed in the current network, as the **Image 9** shows:

print	er ser	rver conf	ig tool				-		×
			-					中文	18
Device List	Config	Parameter	Firmware upo	iate				9	
IP Addr		Device N	ame Ver	sion	Bluetooth	Wifi	MAC		
192.168.1.1	39	MPS-N0	1 202	10109			08:00:27:00:	01:92	
192.168.1.1	38	MPS-BN	101 202	10109			08:00:27:00:	01:92	
192.168.1.1	28	MPS-N0	202	10109			08:00:27:00:	01:92	
1									
				and the second se		and the second second			

Image 9

www.loyalty-secutech.com



4.6 WiFi Parameter Configuration

Note: Only the print server with WiFi function, can proceed on the WiFi Wizard process.

In the "Config Parameter" page, click "WIFI configuration wizard" to continue the WiFi setting as Image 10 shows:

Drinter conver d	🚰 WIFI Wizard	_		×
Printer server c		WIFI confi	guration wizaı	d I ENG
	Scan for nearby WIFI hotspots :	Scan		-18
Device List Config	Choose available WIFI :			-
Device network parar				
Use DHCP to ob				
IP Addr:				
Subnet mask:		Back	Next	
If the product is eq	uipped with WIFI function, you can	WIFI configuration	wizard	

Image 10

Click "Scan" to scan for nearby WiFi hotspots, the result will be displayed in the drop-down list within 5 seconds, select the right WiFi hotspot you need to connect to ,then click "Next", as Image 11 shows



Image 11



Enter to the WiFi Password Setting Menu, input the WiFi password and click "Next", as Image 12 shows:

	🗗 WIFI W	fizard		-		×	111	_11
evice List			WI	I config	uration v	vizard		
Device netwo	Channel :	8	Please enter the	wifi pass	word:			
	SSID :	Loyalty-Secu Tech	1234567					
	MAC :	8C:38:AD:3E:C0:92	Input W	/iFi Pass	word	10		
IP ,	Encryption :	WPA2PSK	Note:					
Schnetz	Algorithm :	AES	If the encryption no password is r	n method equired	is OPEN,		-	Ê.
Jobriett	Signal :	66					Juny 1	1
If the produ								1
			E	lack	Ne	ĸt		2

Image 12

After connected to the WiFi internet, need to configure the WiFi Parameter to obtain an IP address for the WiFi print server.

There also have two methods for getting an IP address for the print server:

Method 1: Use DHCP to obtain an IP address

Method 2: Obtain an fixed IP Address (the procedure is same as 4.4 above)

After confirming the parameter, please click "**Modify network parameters**" write the parameter in to the WiFi module as **Image 13** shows:

printer 🗗	server config tool			-
l	🛐 WIFI Wizard	-	0 ×	11 Ale
Device List	Use DHCP or Ass	ign an IP Address ⁹ (IFI config	uration wizard	
Device netwo	Use DHCP to obtain an IP	address		
Use DHC	IP Addr:	Modify network;	parameters	
TP .	Subnet mask:	Restart the WI	FI module	F I
Subnet r	Gateway:		10	vloc
	DNS:		-	
If the produ	😕 🛿 If need a fix	xed IP address,please fill in the para	meter	
		Back	Flish	

Image 13 After configurating the parameters, please restart the print server.

4.7 Print Server Port

The print server uses a standard RAW interface, the port number is 9100

5 WINDOWS Printer Driver Installation Example

When the network parameter configuration of the print server is completed, please power on the print server, make sure it works under a stable condition.

5.1 Install the Printer Driver

Installing the printer driver is the same procedure as the normal USB printer driver (will not explained here)

5.2 Configure the Printer Port

After installing the printer driver, select the newly installed printer in the control panel, select the printer, and right click printer properties. As shown in the **Image 14/15/16**, different operating systems may have some differences.

6		Shenzhen Loyalty-Secu Technology Co., LTD
LOYALTY -SECU		
	k∰ 🔄 Connect	
	Contact Su	ipport
	Click the s	tart menusetting 📮 🕞
		Image 14
		Windows Settings
		Find a setting $ ho$
	口	
	System Display, notifications, apps, Blue	Devices Network & Internet etooth, printers, mouse Wi-Fi, airplane mode, VPN Ba
	power	
	PUTTU MARAN MUMAT . BUARLANN	Image 15
	C Settings	
	Ø Home	
	Find a setting	Let Windows manage my default printer
	Devices	When this is on. Windows will set your default printer to be the
	Printers & scanners	one you used most recently at your current location.
	🖅 Connected devices	
	Mouse & touchpad	Download over metered connections
	📟 Typing	To help prevent extra charges, keep this off so device software (drivers, info, and apps) for new devices won't download while you're on metered laternet connections
	🕑 AutoPlay	• Off
	🖞 USB	Deleted settings
		Related Settings
		Devices and printers
		×

Image 16



Image 17 demonstrates an example of installing the HP 1020 printer for reference:

To Devices and Printers –	×
\leftarrow \rightarrow \checkmark \uparrow \blacksquare (Hardware and Sound \Rightarrow Devices and Printers \checkmark \bigcirc Search Devices and Printers \Rightarrow	D
Add a device Add a printer 1 Click here to Add a new printer	2
V Devices (4)	^
× PESKTOP-HNT84 G K8 Choose a device or printer to add to this PC Searching for device	
✓ Multimedia Devic	
Shen_HomeTV	
V Printers (4)	
The printer that I want isn't listed 2 Click this text	~
10 item Next Cancel	

Image 17

After clicking "Add a printer", choose and click "The Printer that I want isn't listed" as Image 18 shows.

		×
÷	🖶 Add Printer	
	Find a printer by other options	
	○ My printer is a little older. Help me find it.	
	○ Select a shared printer by name	
		Browse
	Example: \\computername\printername or http://computername/printers/printername/.printer	
	○ Add a printer using a TCP/IP address or hostname	
	○ Add a Bluetooth, wireless or network discoverable printer	
	Add a local printer or network printer with manual settings Click this option Click this option	
	Nex	t Cancel



×

Image 18

Click the	"Next	"button
-----------	-------	---------

←	Add Printer		×
`	Chappene printer port		
	Choose a printer port		
	A printer port is a type of connect	on that allows your computer to exchange information with a printer	
	○ Use an existing port:	LPT1: (Printer Port)	\sim
	Create a new port:		
	Type of port:	Standard TCP/IP Port	\sim
		Next Cance	el

Create a new port, and the type of port is "Standard TCP/IP Port", Click the" Next" button.

				2
÷	🖶 Add Printer			
	Type a printer hostname o	or IP address		
	Device <u>t</u> ype:	TCP/IP Device		~
	Hostname or IP <u>a</u> ddress:	192.168.1.128 1 Input print serv	er's IP	
	<u>P</u> ort name:	192.168.1.128		
	Query the printer and automat Cancle this opt	ically select the driver to use	l	
			<u>N</u> ext	Cancel

Then Click the "**Next**" button.



					×
←	🖶 Add Printer				
	Additional port	information required			
	The device is not	found on the network. Be sure	that:		
	 The device is t The network is The device is p The address or If you think the ac address and perfordevice type below 	urned on. ; connected. properly configured. n the previous page is correct. Idress is not correct, click Back prm another search on the netv /.	to return to the previous pa vork. If you are sure the add	age. Then correct the dress is correct, select th	he
	Device Type				
	◯ <u>S</u> tandard	Generic Network Card		~	
	© <u>C</u> ustom	S <u>e</u> ttings this option,Use Custo	om		
				<u>N</u> ext Car	ncel

Click the "Next "button, then now start to install the printer driver

Add Printer	←	÷.	Add	Printer
-------------	---	----	-----	---------

Install the printer driver



Choose your printer from the list. Click Windows Update to see more models.

To install the driver from an installation CD, click Have Disk.

		^
🔄 HP LaserJet 1018		
🔄 HP LaserJet 1020		
🔄 HP LaserJet 1022		
🔄 HP LaserJet 1022n		
C I ID II + 1000		*
This driver is digitally signed.	Windows Update	Have Disk
Tell me why driver signing is important		

The next step is to configure the printer properties, as shown in the Image 19



			See what's printing	
Fax	HP L	_	Set as default printer Printing preferences	soft XPS
			Printer properties	nent Writer
LaserJet 1020 Mo Categ	odel: jory:		Create shortcut	
Sta	atus:	-	Remove device	
			Troubleshoot	
			Properties	



HP LaserJet 1020 Prope	erties		
eneral Sharing Ports	Advanced Color Manageme	nt Security 配置	
HP LaserJet 1	020		
rint to the following po hecked port.	ort(s). Documents will print t	o the first free	
Port	Description	Printer	^
COM4:	Serial Port		
FILE:	Print to File		
WSD-3be1f116-096	d WSD Port		
192.168.1.128	Standard TCP/IP Port	HP LaserJet 1020	
PORTPROMPT:	Local Port	Microsoft XPS Doci	L
IR	Local Port		~
<		>	
Add Por <u>t</u>	Delete Port	<u>C</u> onfigure Port	
] <u>E</u> nable bidirectional s] E <u>n</u> able printer poolin	upport 1 Cancle th	is option	
	OK Can	cel <u>A</u> pply	Help

After installing the printer driver, some printers come with the default **IMF** data format, so we need to change it into **RAW** data format. Please refer to the **Image 20**:



HP LaserJet 1020 Pro	operties 1	Advanced	Page		×	
General Sharing Ports	Advanced	Color Management	Security	配置		
Always available	D : + D					~
O Available from	Print Process	or				×
Priority: 1	Selecting a c available for selection be	different print proce default data types low will be used.	essor may If your se	result in diffe rvice does no	erent options be t specify a data	ing type, the
Driver: HP La	Print proces	sor:		Default data	type	
Speel print docur	HP1020Prin	tProc		RAW	Chang	e data
	winprint				type:R	AW
Start printing						
O Print directly to th						
Hold mismatched						
Print spooled doc				(ОК	Cancel
Keep printed doc						
🗹 Enable advanced p	printing featur	es 🛛 🛛 Click	this bu	utton	-	
Printing Defaults.	Prin	t Processor	Separa	tor Page		
	(OK Cance		Apply	Help	

Image 20

Now all settings have been completed, we can start to print a test page.

To HP LaserJet	1020 Properties	\times			
General Sharir	HP LaserJet 1020 ×				
So Location:	A test page has been sent to your printer This test page briefly demonstrates the printer's ability to print graphics and text, and it provides technical information about the printer. Use the printer troubleshooter if the test page does not print correctly.				
Comment:	Get help with printing				
	Close				
Model:	HP LaserJet 1020				
Features Color: No	Paper available:				
Double-sid Staple: No	ded: Yes				
Speed: Un Maximum	known resolution: 600 dpi				
	Preferences Print Test Page				
	OK Cancel Apply	Help			