



# DPKP01H00

DevicePort® Dock Mode

Ethernet enabled Printer Port Replicator



## Introduction

SUNIX DevicePort® is the ideal choice to enable your current Legacy I/O devices networking. DPKP01H00 allows users to expand printer port over Ethernet connection, and it works as a PCIe add-on card operation on any windows based tiny desktop, laptop, or All-in-one system. It is provided with SUNIX DPL2000Q High-Performance Ethernet-Printer controller and exclusive I/O redirection technology. DevicePort® DPKP01H00 creates real time communication physical LPT port and Ethernet-LPT port hot-plug capability; user can expand legacy port easily without complex software configuration that improves deployment efficiency to achieve greater convenience for commercial automation applications.

## Features

- Expands one additional Printer LPT ports over Ethernet networking.
- Works as a PCIe add-on card operating experience with Ethernet Hot-Plug capability.
- DevicePort® Dock mode supports secured connection between PC host and DevicePort®. (\*Note 1)
- Built-in SUNIX DevicePort® DPL2000Q High-Performance Ethernet-Printer controller.
- SUNIX DevicePort® proprietary Ethernet I/O Redirection Technology. (\*Note 2)
  - Port auto-mapping with real time data transmit and receive communication.
  - Physical LPT port accessed via device manager.
  - Up to 3 LPT ports working on windows system simultaneously.
- Accesses tradition LPT port by using existing software and AP. (\*Note 3)
- Low power consumption design for Green Environment.
- Certified by CE, FCC, VCCI, C-Tick, BSMI, RoHS, and Microsoft WHQL approval.

Note:

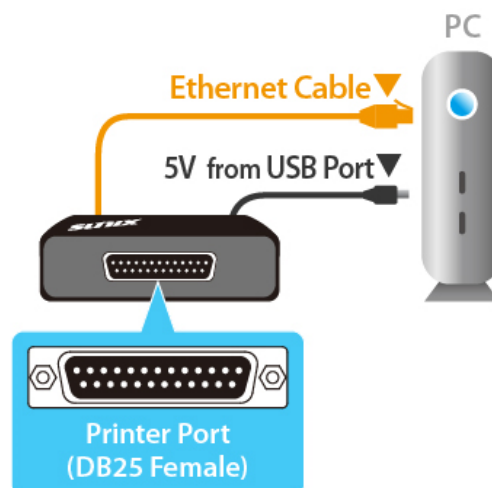
1. To prevent on-line spy recording, DevicePort® **Dock Mode** limits specific Ethernet port connection, and it does not works on router or switch operation.
2. Ethernet I/O Redirection technology is SUNIX proprietary protocol for COM, LPT, and digital IO expansion over category6/5 Ethernet cable.
3. LPT port does not support LPT Key Locker and other Parallel devices, but Printer only. It does not support legacy 278/378/3BC ISA address either. 3. LPT port does not support LPT Key Locker and other Parallel devices, but Printer only. It does not support legacy 278/378/3BC ISA address either.

## Applications

With SUNIX DPL2000Q High-Performance Ethernet-UART controller and exclusive I/O redirection technology, user can expand RS-232 COM and Printer LPT Port easily without complex software configuration.



Small PC form factor requirements grow and advance continuously to meet up-and-coming challenges and opportunities. SUNIX DevicePort® products are specifically developed to meet such requirements to replace current add-on card solution. User can expand legacy I/O ports over Ethernet connection that improves deployment efficiency to achieve greater reliability in commercial and industrial automation applications.



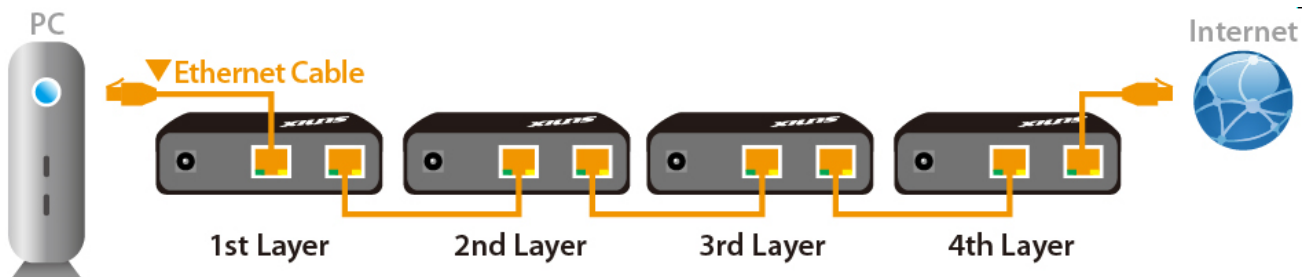
With Ethernet hot-plug and system auto-detect capability, user can expand RS-232 COM and LPT port easily without complex software configuration. Just plug RJ45 Ethernet cable between SUNIX DevicePort® and PC host side, system will create physical COM/LPT ports automatically with real time data transmit and receive communication. User can easily access port by using existing software and application, no longer TCP sock protocol compiling.

### DevicePort® Auto-Detect & Port-Mapping

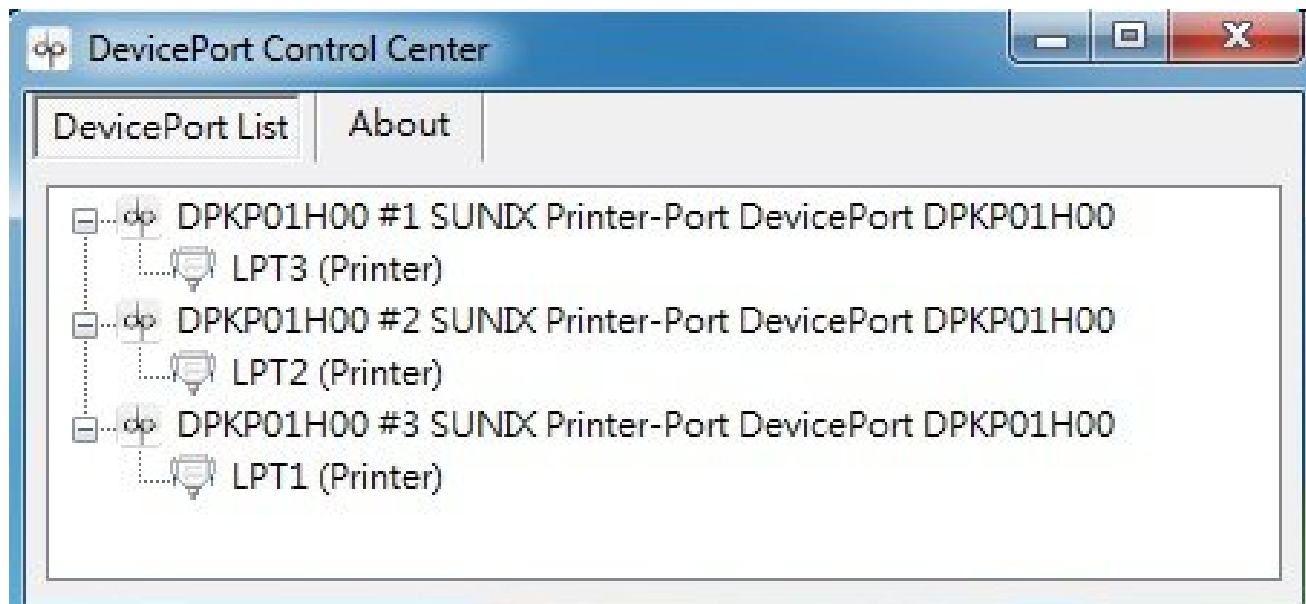
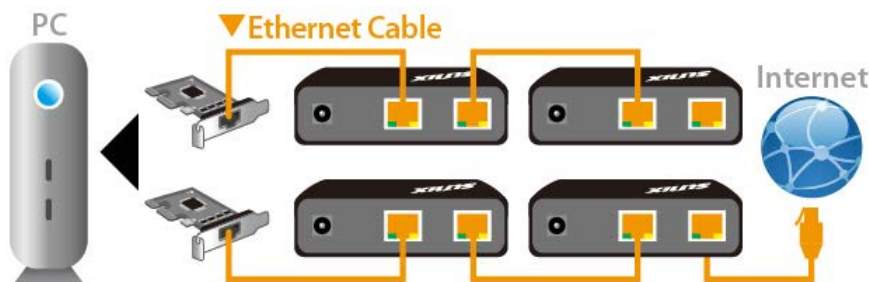


SUNIX DevicePort® product built-in dual 10/100 Ethernet channels, one for data downstream to PC host and the other upstream port for Ethernet switch connecting. With dual Ethernet channels feature, DevicePort® supports daisy chain network topology for multiple boxes connection. (Maximum 4 boxes or 12 COM / 3 LPT ports expansion).

### DevicePort® Daisy Chain Topology Type 1



### DevicePort® Daisy Chain Topology Type 2



## Specifications

### Parallel Communication

<b>Interface</b>	IEEE1284 Printer Support <sup>(*Note 3)</sup>
<b>Controller</b>	SUNIX DPL2000Q
<b>No. of Port</b>	1-port
<b>FIFO</b>	1Kbyte Hardware / per port
<b>Speed</b>	Maximum 2.7MBps
<b>PCB Connector</b>	DB25 Female
<b>Protection</b>	±15KV ESD IEC6000-4-2 Air Discharge ±8KV ESD IEC61000-4-2 Contact Discharge

### Ethernet Communication

<b>Number of Ports</b>	2-port <sup>(*Note 1)</sup> Upstream to Ethernet Switch Downstream to PC Host
<b>Speed</b>	10/100 Mbps, auto MDI/MDIX
<b>Connector</b>	RJ45
<b>Magnetic Isolation Protection</b>	1.0K Built-in

### Power Requirements

<b>Input Voltage</b>	5 to 12VDC
<b>Power Consumption</b>	2.5W @ 5VDC
<b>Connector</b>	DC-Jack

### Driver Support

<b>Microsoft Client</b>	XP / 7 / 8 / 8.1 (X86/X64)
<b>Microsoft Server</b>	2003 / 2008 / 2012R2 (X64)

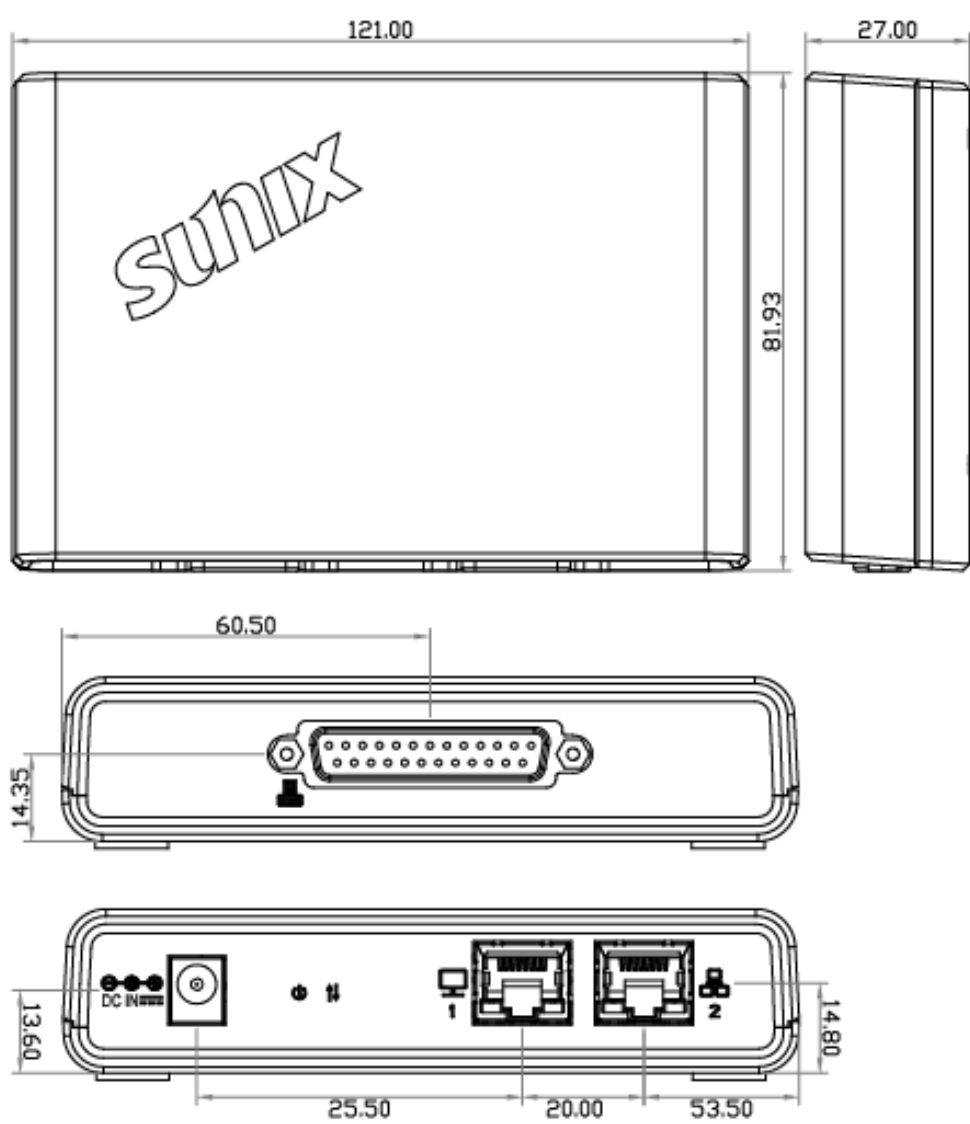
### Regulatory Approvals

<b>Hardware EMC</b>	<ul style="list-style-type: none"> <li>● EUR: CE EN55022 Class B, EN55024</li> <li>● US: FCC Part 15 Class B</li> <li>● TAIWAN: BSMI: CNS13438</li> <li>● AS/NZS: C-Tick: CISPR22 AS/NZS</li> <li>● JAPAN: VCCI</li> </ul>
<b>Software Driver</b>	Microsoft WHQL Windows <ul style="list-style-type: none"> <li>● Microsoft Client: XP/7/8/8.1 (X86/X64)</li> <li>● Microsoft Server: 2003/2008/2012R2 (X64)</li> </ul>

## Environment

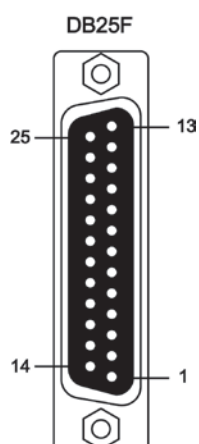
Operation Temperature	0 to 45°C (32 to 113°F)
Operation Humidity	5 to 95% RH (non-condensing)
Storage Temperature	-20 to 85°C (-4 to 185°F)

## Physical Characteristics

Housing	ABS, PC, Metal
Weight	146.3g
Dimensions	<p>121x81.93x27(mm), 4.7x3.2x1.0(inch)</p>  <p>The technical drawings include:</p> <ul style="list-style-type: none"> <li><b>Front View:</b> Shows the SUNIX logo. Dimensions: 121.00 mm width, 81.93 mm height, and 27.00 mm depth.</li> <li><b>Top View:</b> Shows the D-sub connector. Dimensions: 60.50 mm width and 14.35 mm height.</li> <li><b>Rear View:</b> Shows the DC input jack, power switch, and two RJ45 ports labeled 1 and 2. Dimensions: 13.60 mm height, 25.50 mm distance from left edge to power switch, 20.00 mm distance between ports, and 53.50 mm distance from right edge to port 2.</li> </ul>

## Pin Assignment

### ■ Parallel



DB25F	PIN	DB25F	PIN
1	STROBE	14	AUTO FEED
2	DATA0	15	ERROR
3	DATA1	16	INT
4	DATA2	17	SELECT INPUT
5	DATA3	18	GND
6	DATA4	19	GND
7	DATA5	20	GND
8	DATA6	21	GND
9	DATA7	22	GND
10	ACKNOWLEDGE	23	GND
11	BUSY	24	GND
12	PAPER EMPTY	25	GND
13	SELECT		

## Package

- DPKP01H00- DevicePort® Dock Mode, Ethernet enabled Printer Port Replicator
- Quick Installation Guide
- Software CD Driver
- Power Jack to USB TyepA Male Cable, 120cm (4ft.)



## Product Family

### ■ RS-232

Mode	Port	Connector	Baud Rate	ESD Protection	PoweredCOM	Model
Dock	8	DB9M	921.6Kbps	±15KV	-	DPKX08H00
	8	DB9M	115.2Kbps		-	DPKS08H00
	4	DB9M	921.6Kbps		-	DPKX04H00
	4	DB9M	115.2Kbps		-	DPKS04H00
	4	DB44F	115.2Kbps		-	DPKS04HZ0
	4	DB44F	115.2Kbps		5VDC	DPKS04HZP
	2	DB9M	921.6Kbps		-	DPKX02H00
	2	DB9M	115.2Kbps		-	DPKS02H00
Advanced	32	RJ45	921.6Kbps	±15KV	-	DPAS32G00
	16	RJ45	921.6Kbps		-	DPAS16G00
	8	DB9M	921.6Kbps		-	DPAX08H00
	8	DB9M	115.2Kbps		-	DPAS08H00
	4	DB9M	921.6Kbps		-	DPAX04H00
	4	DB9M	115.2Kbps		-	DPAS04H00
	4	DB44F	115.2Kbps		-	DPAS04HZ0
	4	DB44F	115.2Kbps		5VDC	DPAS04HZP
	2	DB9M	921.6Kbps		-	DPAX02H00
	2	DB9M	115.2Kbps		-	DPAS02H00

### ■ Multi I/O

Mode	Port		Connector		Speed		ESD Protection	Model
	COM	Printer	COM	Printer	COM	Printer		
Dock	2	1	DB9M	DB25F	115.2Kbps	2.7MBps	±15KV	DPKM21H00
	1	1	DB9M	DB25F	115.2Kbps	2.7MBps		DPKM11H00
Advanced	2	1	DB9M	DB25F	115.2Kbps	2.7MBps	±15KV	DPAM21H00
	1	1	DB9M	DB25F	115.2Kbps	2.7MBps		DPAM11H00

### ■ Printer

Mode	Port	Connector	Speed	ESD Protection	Model
Dock	1	DB25F	2.7MBps	±15KV	DPKP01H00
Advanced	1	DB25F	2.7MBps	±15KV	DPAP01H00

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