

# U P S

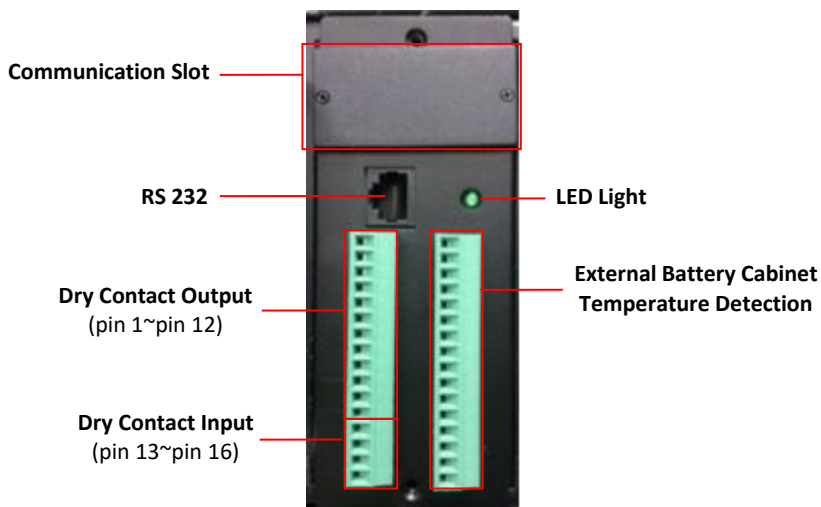
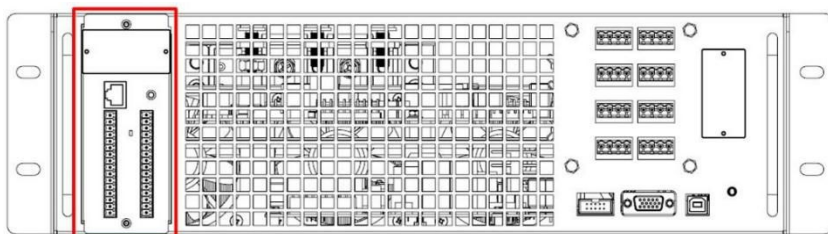
**Extra Communication Card**

■ **USER'S MANUAL** ■

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# 1. Appearance



## 2. Introduction

Extra communication card provides additional interface function for UPS to interact with the environment. Extra communication card can also provide a variety different applications for UPS. The communication interfaces of extra communication card are listed below:

- LED Light
- RJ45 port
- Communication Slot
- Dry Contact Output (pin 1 ~ pin 12)
- Dry Contact Input (pin 13 ~ pin 16)
- External Battery Cabinet Temperature Detection

### 2.1 LED Light

Green LED Light shows the status of the extra communication card.

Light status and descriptions are listed as the below:

Status	Description
Flashing	Connected: On/0.1s, Off/0.4s
	Not Connected: On/0.1s, Off/0.1s
Off	Power off or ID conflict

### 2.2 RS-232 port

RS-232 port is designed for detecting dry contact status via monitoring software and setting features for dry contact with supplied utility tool.

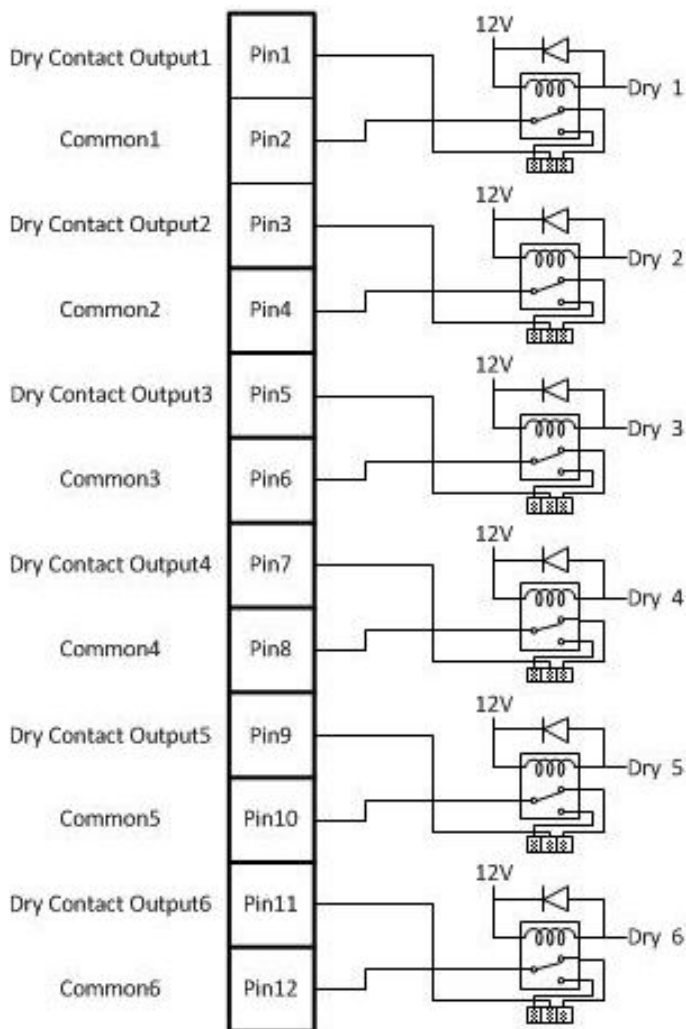
### 2.3 Communication Slot

Communication Slot is designed for internally fitted optional SNMP card.

## 2.4 Dry Contact Output (pin 1 ~ pin 12)

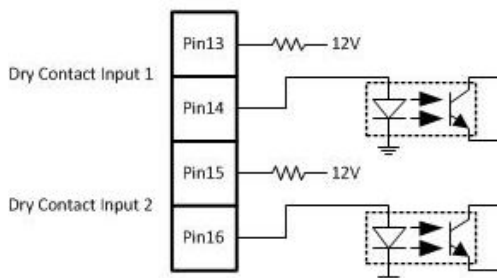
There are 6 sets of dry contact outputs and can be set to normally open or normally close by setting jumper. Please refer to **Chapter 5 Jumper Set-up** for more details.

Also, feature of each dry contact output port can be set though the Extra Com Config tool software. Please refer to **Chapter 4 Configuration** for more details.



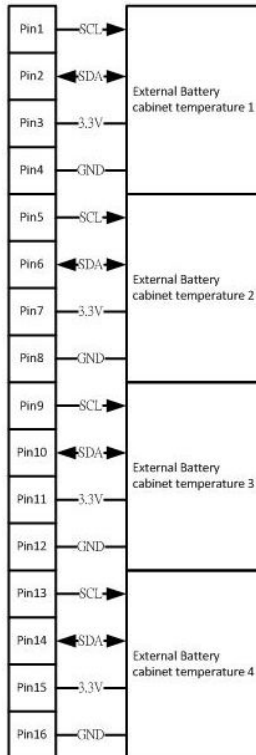
## 2.5 Dry Contact Input (pin 13 ~ pin 16)

There are two sets of dry contact input to receive external signals for UPS to take response.



## 2.6 External Battery Cabinet Temperature Detection (Option)

"Sensor Kit" could be ordered as an optional accessory to detect the temperature of external battery cabinet. The description of the feature of each pin are as the picture below:



### 3. Installation

**Step 1:** Remove cover of slot on the STS module



**Step 2:** Insert extra communication card into slot





**Step 3:** The cover of extra communication card should attach close to STS module. Secure the extra communication card to the STS module chassis with 2 screws.



**Step 4:** Use RJ45 cable to connect UPS and equipment to implement remote monitoring and control.



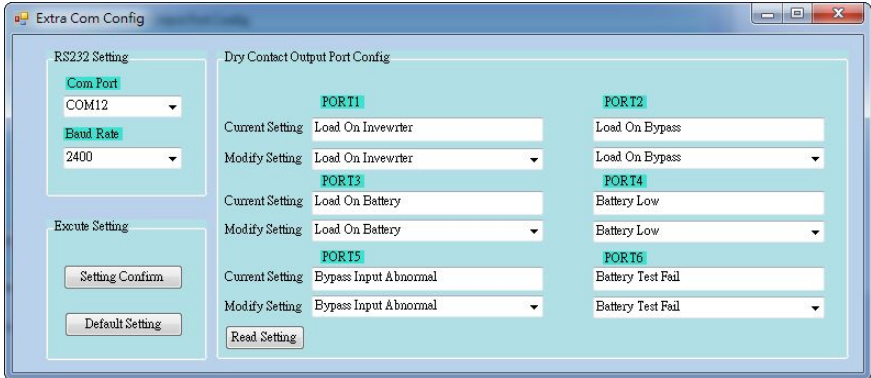
## 4. Configuration

**Step 1:** Install utility tool for Extra Communication in your computer. After software is installed successfully, it will pop up a plug icon in the tray.

Please download the software from the link below:

<http://www.upspowercom.com.tw/UPS-ONL-M.jsp>

**Step 2:** Start "Extra Com Config" to get to the control menu as follow:



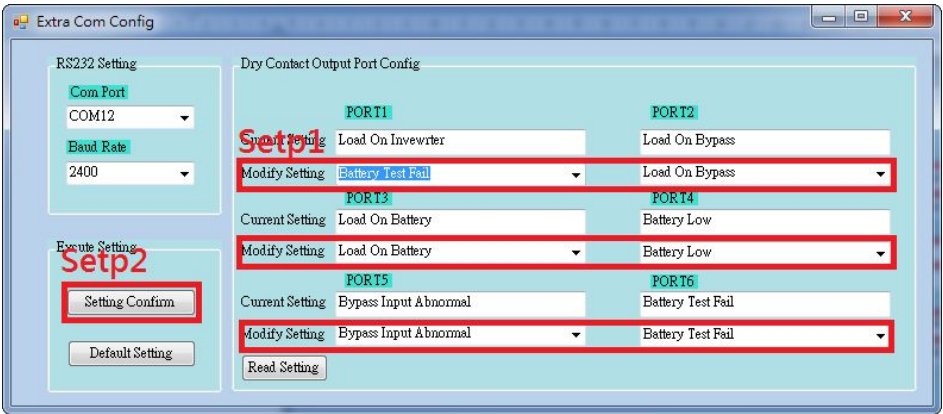
**Step 3:** Click "Read Setting" button to check the current setting of the dry contact output port.



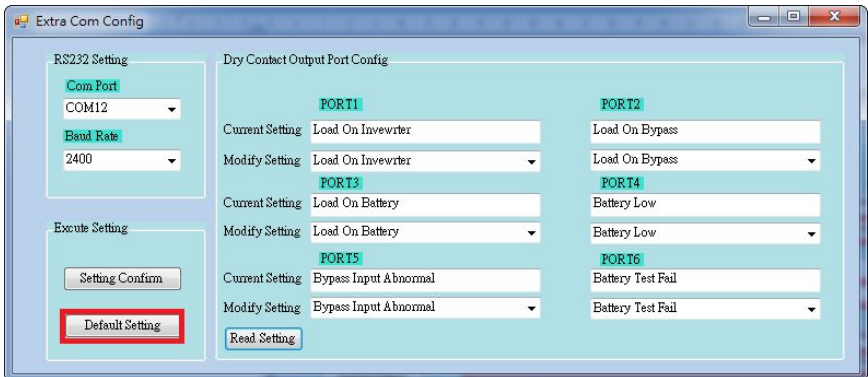
**Step 4:** Feature settings for all ports.

There are 20 features to select for contact listed in the following. Once dry contact output settings are selected, click "Setting Confirm" button.

<b>Contact</b>	<b>Features</b>	<b>Description</b>
<b>1</b>	Load on inverter	The UPS is working normally.
<b>2</b>	Load on bypass	The UPS is in Bypass mode.
<b>3</b>	Load on Battery	The UPS is in Battery mode.
<b>4</b>	Low battery	The battery voltage is low.
<b>5</b>	Bypass input abnormal	The bypass voltage or frequency is abnormal.
<b>6</b>	Battery test failure	Performs the battery test. The battery test fails.
<b>7</b>	Internal communication failure	DSP and MCU stop communication in power module.
<b>8</b>	External parallel communication failure	Communication error between power modules.
<b>9</b>	Output overload warning/shutdown	Connected load is over rated output of the UPS.
<b>10</b>	Power module fault shutdown	The module fails and the UPS shuts down.
<b>11</b>	Power module warning	The module has errors, but the UPS can still function normally.
<b>12</b>	EPO Active	Urgently power off the UPS.
<b>13</b>	Maintain Bypass	The UPS transfers to Maintain bypass mode.
<b>14</b>	Module over temperature warning/shutdown	The temperature is too high.
<b>15</b>	Battery replacement	Overdue for battery replacement (Compared with system setup.)
<b>16</b>	Bypass over temperature warning/shutdown	Bypass "static transfer switch" is over temperature.
<b>17</b>	Bypass static switch fault	The bypass "static transfer switch" is abnormal.
<b>18</b>	Line AC fail	Power failure
<b>19</b>	Bypass failure	Bypass source fails
<b>20</b>	Redundancy failure	Redundancy setting error.

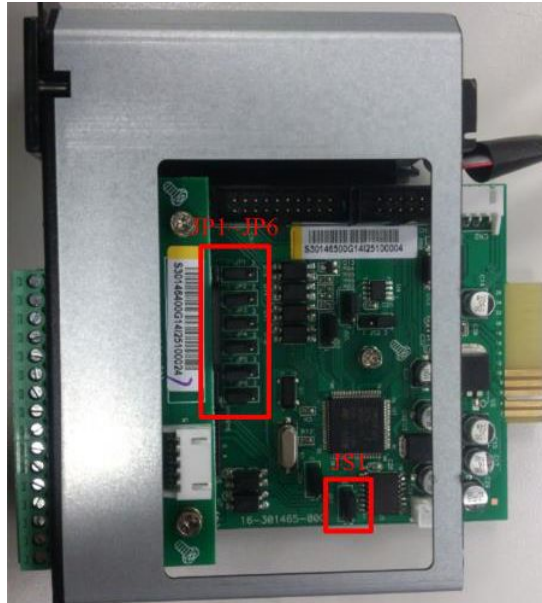


“Default Setting” button: Will set all configurations back to default as the picture shows below:

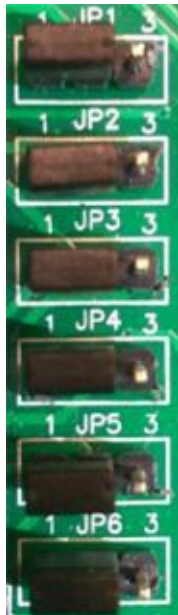


## 5. Jumper Setup

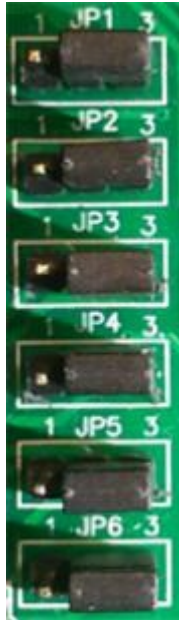
Dry contact output port can be set normally open or normally close from JP1 to JP6. The 3-pin connectors can be easily found just nearby relay. The ID number of the Extra communication card can be set as 60 or 61 in JS1.



Connect pin 1 and pin 2 of JP1 to set normally open type for dry contact output port. Same connection is applied from JP1 to JP6.



Connect pin 2 and pin 3 of JP1 to set normally close type for dry contact output port. Same connection is applied from JP1 to JP6.



Please connect pin 1 and pin 2 of JS1 to set ID number of Extra communication card as 60 in JS1.



Please connect pin 2 and pin 3 of JS1 to set ID number of Extra communication card as 61in JS1.

