

Packing List

In addition to this guide, the package includes the following items:



iWSN-930R-LK-AC-IP33



Screw Driver (1C016)

Resources

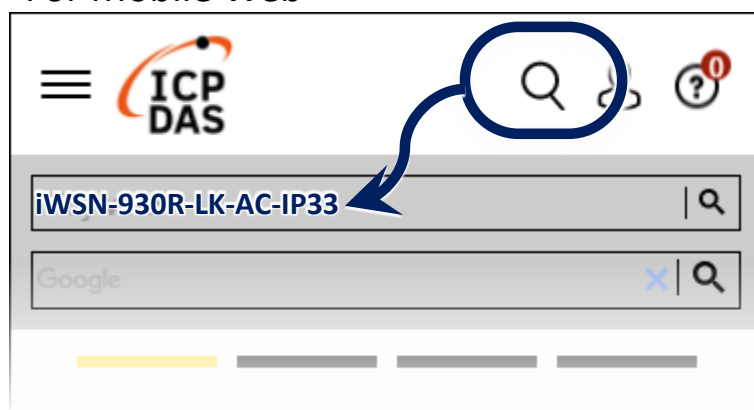
Technical Support

service@icpdas.com

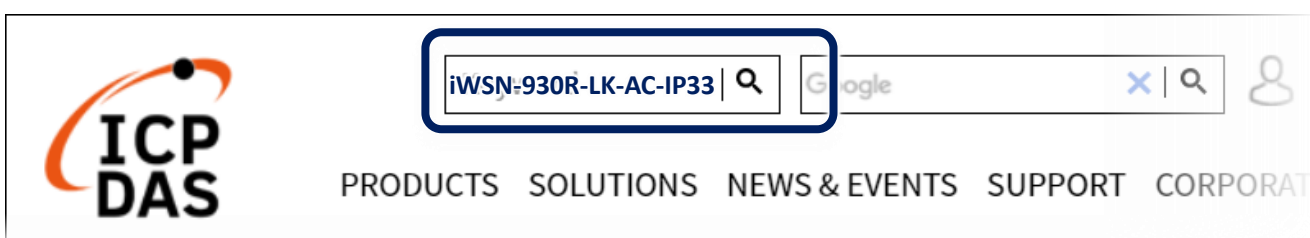
www.icpdas.com

How to search for drivers, manuals and spec information on ICP DAS website.

- For Mobile Web



- For Desktop Web

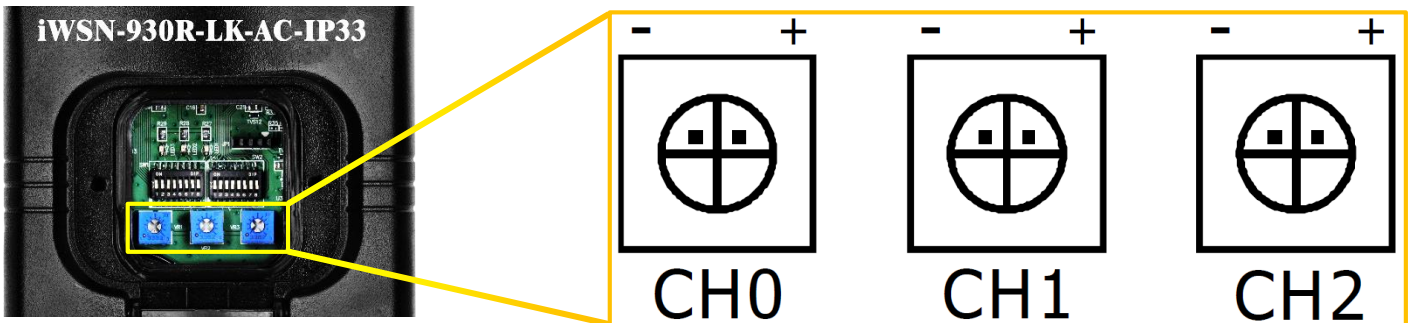


1 Lift off the protective cover



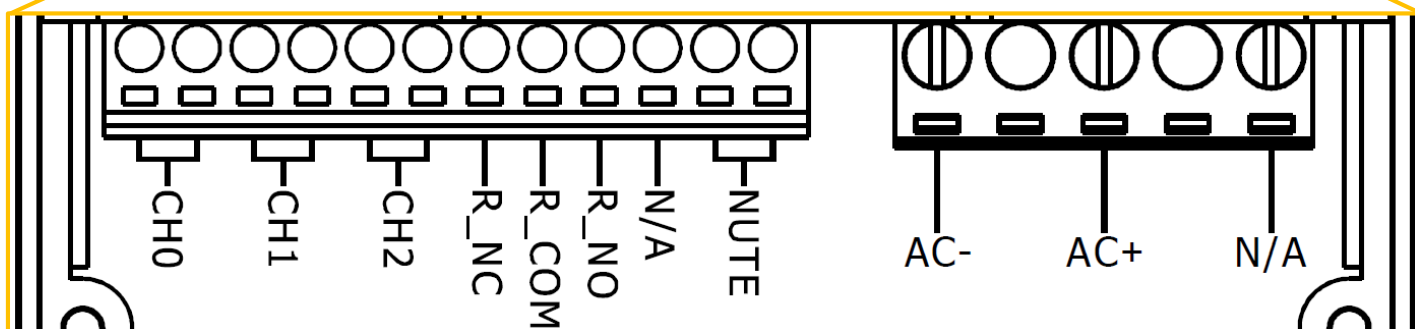
Please refer to the figure on the right, remove the screws in the circle one by one, and then the protective cover of the DIP switch and the terminal block can be lift off.

2 Liquid Leak detection sensitivity adjustment



iWSN-930R-LK-AC-IP33 is a module with 3-channel liquid leakage detection function. Each liquid leakage detection channel can adjust the sensitivity of liquid leakage detection independently. The knobs correspond to liquid leak detection channels 0 ~ 2 from left to right. Rotate counterclockwise to reduce the sensitivity of liquid leak detection; on the contrary, rotate clockwise to increase the sensitivity of liquid leak detection. There are 25 levels of sensitivity to adjust from low to high.

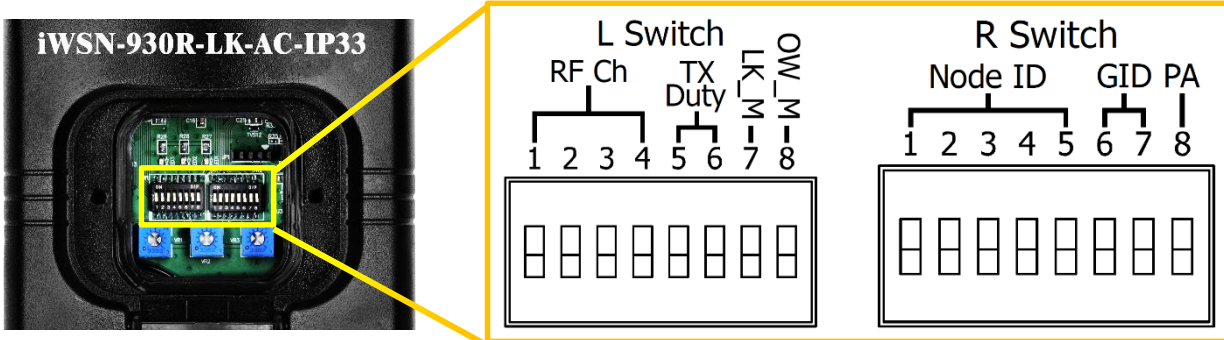
3 Terminal block Pin assignment



Name of Pin		Instructions
Terminal block at Left side	CH0	Liquid Leakage detection channel 0, wiring is not divided into positive and negative.
	CH1	Liquid Leakage detection channel 1, wiring is not divided into positive and negative.
	CH2	Liquid Leakage detection channel 2, wiring is not divided into positive and negative.
	R_NC	Relay output, NC output contact.
	R_COM	Relay output, COM output contact.
	R_NO	Relay output, NO output contact.
	MUTE	Mute contacts. It can mute the buzzer after a short circuit.
Terminal block at Right side	AC-	AC power input, neutral wire contact.
	AC+	AC power input, live wire contact.

4 Setting parameters of DIP Switch

Adjust DIP Switch according to the parameter table: Please refer to the parameter table below.



Left switch																																																																																																											
Pin/Name		Instructions																																																																																																									
Pin 8 OW_M (Open Wire detection Alarm mode)		■ : ON → Latched mode □ : OFF → Momentary mode																																																																																																									
Pin 7 LK_M (Liquid Leak detection Alarm mode)																																																																																																											
Pin 5~6 TX Duty (RF transmit duty) ■ : ON □ : OFF		<table><tr><th rowspan="2">Period</th><th colspan="2">Pin</th></tr><tr><th>5</th><th>6</th></tr><tr><td>1sec</td><td>□</td><td>□</td></tr><tr><td>10 sec</td><td>■</td><td>□</td></tr><tr><td>30 sec</td><td>□</td><td>■</td></tr><tr><td>60 sec</td><td>■</td><td>■</td></tr></table>								Period	Pin		5	6	1sec	□	□	10 sec	■	□	30 sec	□	■	60 sec	■	■																																																																																	
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Pin 1~4 RF Ch (RF Channel) ■ : ON □ : OFF		<table><tr><th rowspan="2">Ch</th><th colspan="4">Pin</th><th rowspan="2">Ch</th><th colspan="4">Pin</th></tr><tr><th>1</th><th>2</th><th>3</th><th>4</th><th>1</th><th>2</th><th>3</th><th>4</th></tr><tr><td>0</td><td>□</td><td>□</td><td>□</td><td>□</td><td>8</td><td>□</td><td>□</td><td>□</td><td>■</td></tr><tr><td>1</td><td>■</td><td>□</td><td>□</td><td>□</td><td>9</td><td>■</td><td>□</td><td>□</td><td>■</td></tr><tr><td>2</td><td>□</td><td>■</td><td>□</td><td>□</td><td>A</td><td>□</td><td>■</td><td>□</td><td>■</td></tr><tr><td>3</td><td>■</td><td>■</td><td>□</td><td>□</td><td>B</td><td>■</td><td>■</td><td>□</td><td>■</td></tr><tr><td>4</td><td>□</td><td>□</td><td>■</td><td>□</td><td>C</td><td>□</td><td>□</td><td>■</td><td>■</td></tr><tr><td>5</td><td>■</td><td>□</td><td>■</td><td>□</td><td>D</td><td>■</td><td>□</td><td>■</td><td>■</td></tr><tr><td>6</td><td>□</td><td>■</td><td>■</td><td>□</td><td>E</td><td>□</td><td>■</td><td>■</td><td>■</td></tr><tr><td>7</td><td>■</td><td>■</td><td>■</td><td>□</td><td>F</td><td>■</td><td>■</td><td>■</td><td>■</td></tr></table>								Ch	Pin				Ch	Pin				1	2	3	4	1	2	3	4	0	□	□	□	□	8	□	□	□	■	1	■	□	□	□	9	■	□	□	■	2	□	■	□	□	A	□	■	□	■	3	■	■	□	□	B	■	■	□	■	4	□	□	■	□	C	□	□	■	■	5	■	□	■	□	D	■	□	■	■	6	□	■	■	□	E	□	■	■	■	7	■	■	■	□	F	■	■	■	■
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Right switch																												
Pin/Name	Instructions																											
Pin 8	Factory only																											
Pin 6~7	<table><tr><th rowspan="2">Group</th><th colspan="2">Pin</th></tr><tr><th>6</th><th>7</th></tr><tr><td>0</td><td>☐</td><td>☐</td></tr><tr><td>1</td><td>☒</td><td>☐</td></tr><tr><td>2</td><td>☐</td><td>☒</td></tr><tr><td>3</td><td>☒</td><td>☒</td></tr></table>											Group	Pin		6	7	0	☐	☐	1	☒	☐	2	☐	☒	3	☒	☒
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		15	☒	☒	☒	☒	☐	31	☒	☒	☒	☒	☒															
☒ : ON ☐ : OFF																												

5 LED indicator/Buzzer/Relay status description

iWSN-930R-LK-AC-IP33 provides 3 LED status indicators, 1 buzzer and 1 relay. The table below will describe the operation modes of the buzzer and relay in different states.

※Note 1: Each abnormal state has its own priority. When more than 2 abnormal states appear at the same time, the buzzer and relay will be activated and give priority to the abnormal state with higher priority.

※Note 2: The buzzer can be muted through shorting the mute contact of the terminal block. (Please refer to Chapter 2 for instructions)

※Note 3: When the component state is abnormal, the operation of buzzer and relay may be abnormal.

Status	Buzzer	Relay	Priority
Detected liquid leakage.	1s buzz four times.	NC--X--COM-----NO	1
Detected open wire.	1s buzz twice.		2
No liquid leakage or opening wire detected.	Muted.	NC-----COM--X--NO	3

The table below will describe the status indication of the LED indicator.

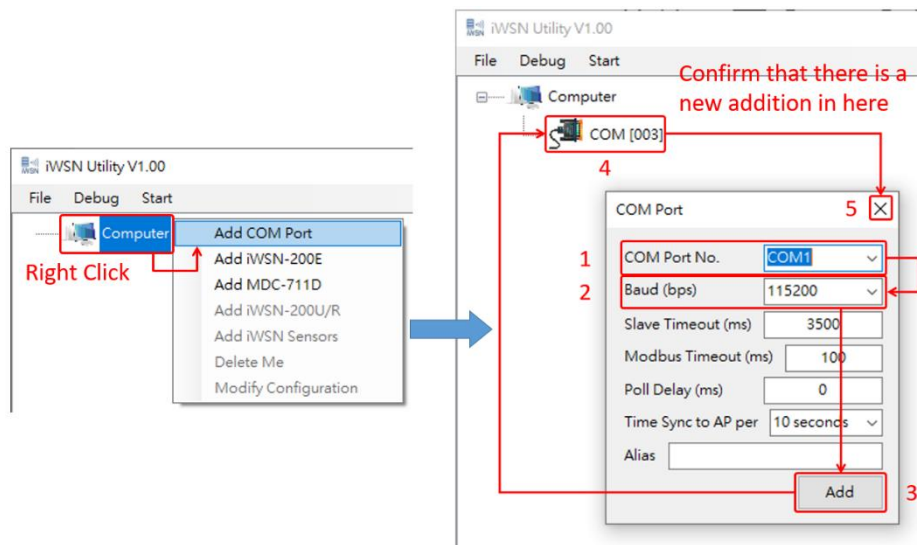
※Note: The yellow indicator is used to indicate multiple abnormal states, and each abnormal state has its own priority. When more than 2 abnormal states appear at the same time, the yellow indicator will give priority to the abnormal state with higher priority.

Indicators	Status	Instructions	Priority
Red LED	OFF	Power off.	
	ON	Power on.	
Green LED	Blink	Green LED indicator will blink while wireless data has been transmitted.	
Yellow LED	500 ms blink continuous	Illegal Node ID, please set the Node ID to 1 ~ 31, and then power on.	1
	1s blink once	Channel detected open wire.	4
	1s blink twice	Component status is abnormal.	2
	Always ON	Channel detected liquid leakage.	3

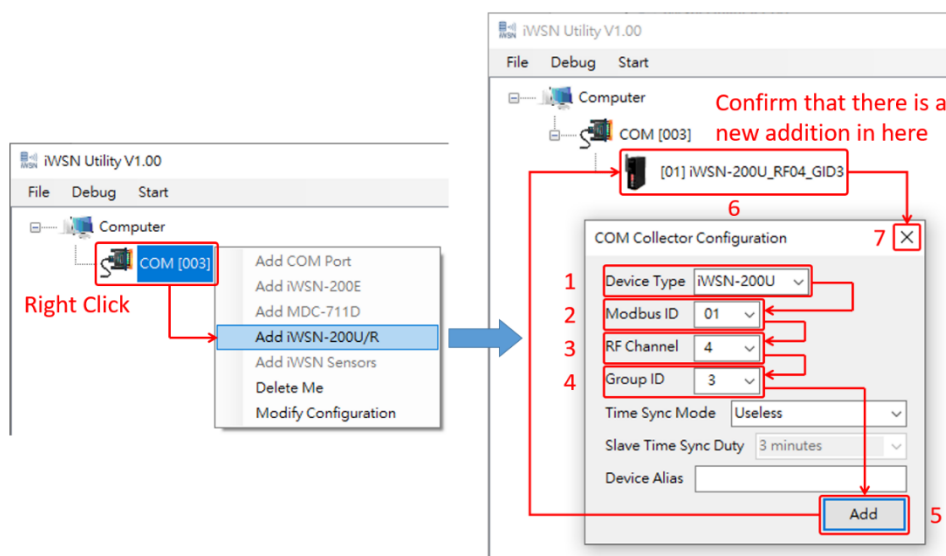
6 iWSN Utility

Users can connect iWSN-200U to PC, and receive the wireless information and analysis automatically returned by iWSN-930R-LK-AC-IP33 through iWSN Utility, and iWSN-930R-LK-AC-IP33 can also be config through iWSN Utility.

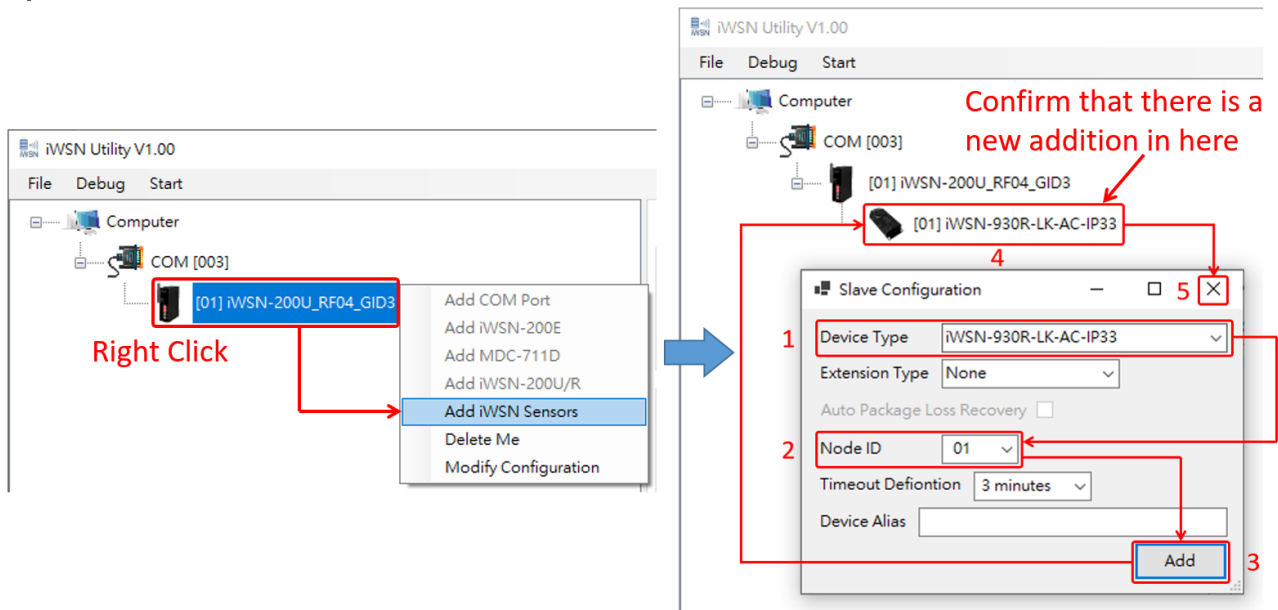
6.1 After opening iWSN Utility, please operate as the figure below. In the “COM Port No.” column, please select the COM Port where the iWSN-200U is connected to the PC. In the “Baud(bps)” column, please select the baud rate that communication with the iWSN-200U.



6.2 Please operate as the figure below. In the “Device Type” column, please select “iWSN-200U”. In the “Modbus ID” column, please select the Modbus ID used by iWSN-200U for Modbus communication. In the “RF Channel” column, please select the wireless communication channel which used by iWSN-200U and iWSN-930R-LK-AC-IP33 for wireless communication. In the “Group ID” column, please select the wireless communication Group ID which used by iWSN-200U and iWSN-930R-LK-AC-IP33 for wireless communication.

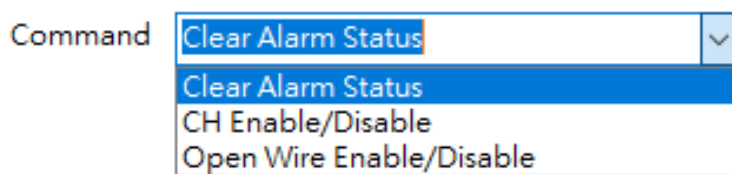


6.3 Please operate as the figure below. In the “Device Type” column, please select “iWSN-930R-LK-AC-IP33”. In the “Node ID” column, please select the Node ID set on the iWSN-930R-LK-AC-IP33.



6.4 After clicking the “[XX] iWSN-930R-LK-AC-IP33” added in the previous step, the iWSN-930R-LK-AC-IP33 information will appear on the right side of the window, and then click the “Start” on the toolbar, iWSN Utility will start to automatically receive the wireless information and analysis automatically returned by iWSN-930R-LK-AC-IP33.

6.5 There are 3 optional commands in the “Command” column on the right side of the information bar. “Clear Alarm Status” command can clear the alarm status of iWSN-930R-LK-AC-IP33. When the alarm mode of iWSN-930R-LK-AC-IP33 is “Latched mode” and an abnormal state is detected, the alarm will not stop even if the abnormal state is eliminated. Use this command can clear the alarm status of iWSN-930R-LK-AC-IP33. “CH Enable/Disable” command can set the liquid leakage detection channel N to enable/disable. “Open Wire Enable/Disable” command can set the open wire detection function of liquid leakage detection channel N to enable/disable.



“CH Enable/Disable” command and “Open Wire Enable/Disable” command must input the setting value by yourself. The value format and description are shown in the following figure

00	00	00
CH0	CH1	CH2
00 : Enable		
01 : Disable		