



## RU-87P1/RU-87P2/RU-87P4/RU-87P8

1/2/4/8-slot RS-485 I/O Expansion Unit with Intelligent CPU Module (DCON Protocol)

### Features

- One RS-485 Port for Multi-Drop Topology
- DCON Protocol (ASCII-based protocol)
- Auto Configuration
- LED Indicators for Fault Detection
- Switches to Configure Communication
- 1/2/4/8 Slot(s) for I-87K Modules
- Operating Temperature: -25 ~ +75 °C



### Introduction

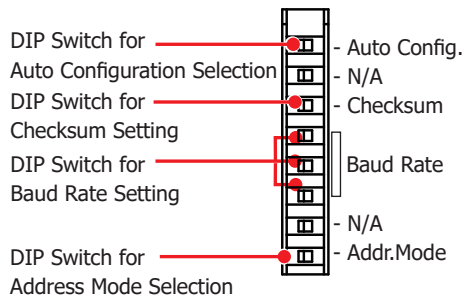
RU-87P1/2/4/8 is a remote intelligent I/O expansion unit that used to expand I-87K series I/O modules over the RS-485 for industrial monitoring and controlling applications. There are more than 50 I/O modules supported with the unit, including analog input/output, digital input/output, and counter/frequency I/O modules.

RU-87P1/2/4/8 is designed to be used in harsh and noisy environment, so the hardware is manufactured with wide power input range (10 ~ 30 VDC) and operating temperature (-25 °C ~ +75 °C). It simplifies installation and maintenance of I/O modules with hot swappable and auto configuration, fault and error detection, dual watchdog, programmable power on and Safe Values.

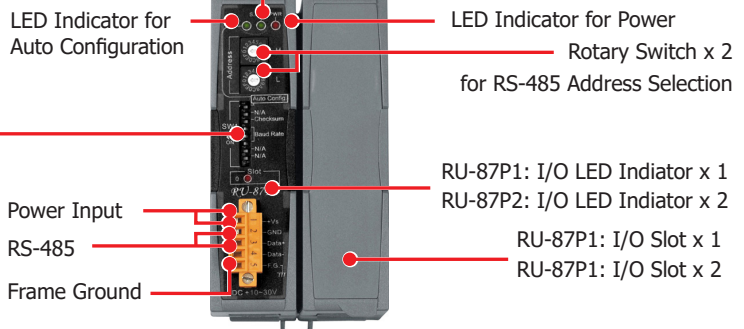
Various software development kits (SDK) and demos are provided, such as PACSDK, LabVIEW driver, InduSoft driver, Linux driver, OPC Server, etc. The I-87K series I/O modules plugged in the RU-87P1/2/4/8 can be easily integrated into variant software system.

### Apparances

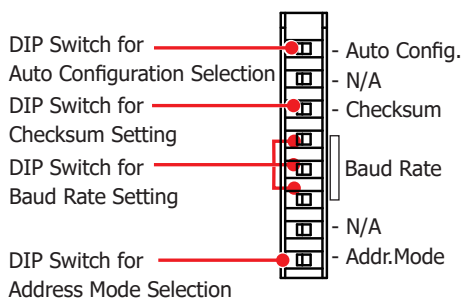
#### RU-87P1/RU-87P2



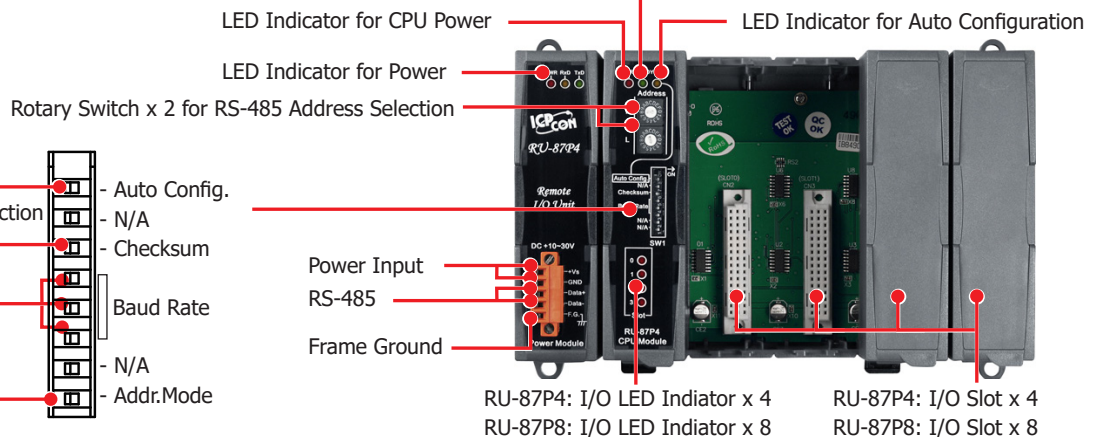
#### LED Indicator for System Status



#### RU-87P4/RU-87P8



#### LED Indicator for System Status

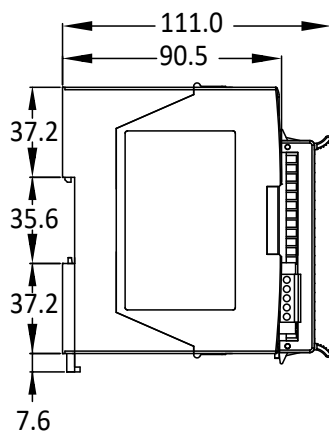


## Specifications

Models	RU-87P1	RU-87P2	RU-87P4	RU-87P8
<b>Communication Interface</b>				
Port Type	1 x RS-485 (3000 VDC Isolated)			
ESD Protection	+/- 4 K Contact Discharge and +/- 8 K Air Discharge			
Communication Protocol	DCON Protocol (ASCII Format)			
<b>HMI</b>				
Rotary Switch	2 x 16 Position (0 ~ F), for RS-485 address			
DIP Switch	8-bit; 1-bit for Auto Configuration Selection, 1-bit for Checksum Setting, 3-bit for Baud Rate Setting, 1-bit for Address Mode Selection			
<b>LED Indicator</b>				
I/O LED Indicator	1	2	4	8
System LED Indicator	1 x Power, 1 x System Status, 1 x Auto Configuration		1 x Power, 1 x CPU Power, 1 x System Status, 1 x Auto Configuration	
<b>I/O Expansion</b>				
I/O Type	I-87K series			
Slots	1	2	4	8
<b>Mechanical</b>				
Dimensions (W x H x D, unit: mm)	64 x 120 x 111	95 x 132 x 111	188 x 132 x 111	312 x 132 x 111
Installation	DIN-Rail, Wall mounting			
<b>Environmental</b>				
Operating Temperature	-25 ~ +75 °C			
Storage Temperature	-30 ~ +80 °C			
Humidity	10 ~ 90 % RH, Non-condensing			
<b>Power</b>				
Input Range	+10 ~ 30 VDC (1 kV Isolated)			
Reverse Polarity Protection	Yes			
Consumption	1.0 W		2.0 W	
Power Board Driving	5.0 W	8.0 W	30.0 W	

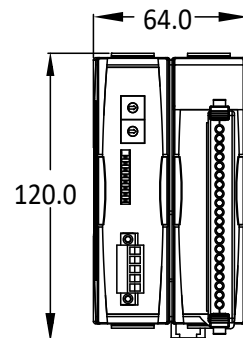
## Dimensions (Units: mm)

RU-87P1/RU-87P2/RU-87P4/RU-87P8



Left Side View

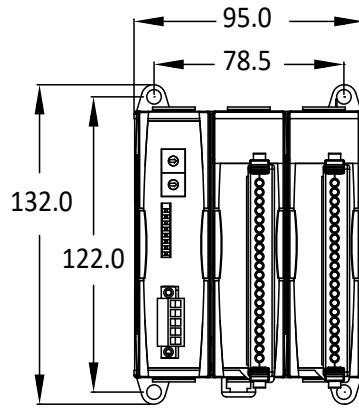
RU-87P1



Front View

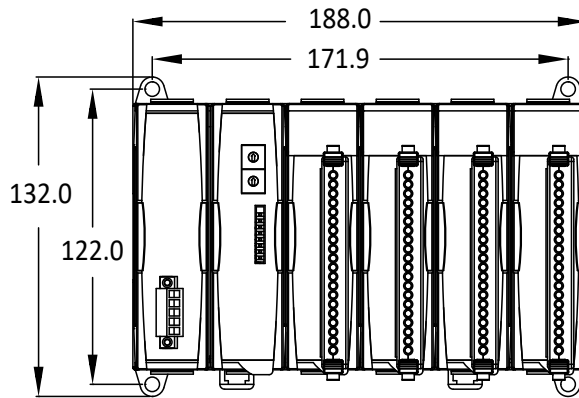
## ■ Dimensions (Units: mm)

**RU-87P2**



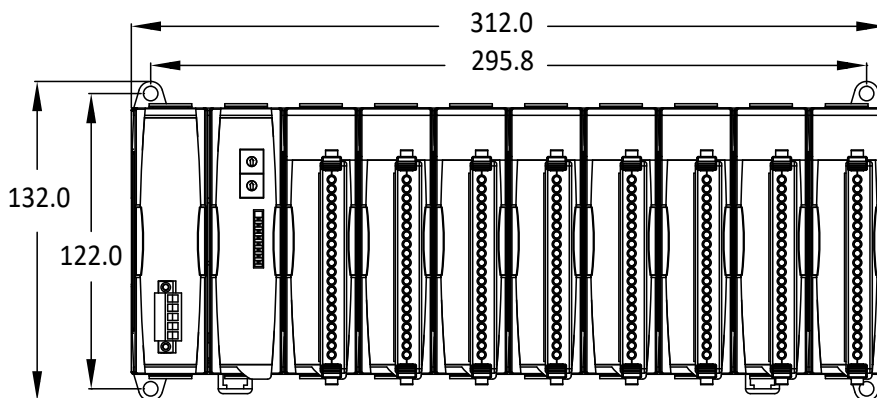
Front View

**RU-87P4**



Front View

**RU-87P8**



Front View

## ■ Ordering Information

<b>RU-87P1-G CR</b>	1-slot RS-485 I/O Expansion Unit with Intelligent CPU Module (DCON Protocol) (Gray Cover) (RoHS)
<b>RU-87P2-G CR</b>	2-slot RS-485 I/O Expansion Unit with Intelligent CPU Module (DCON Protocol) (Gray Cover) (RoHS)
<b>RU-87P4-G CR</b>	4-slot RS-485 I/O Expansion Unit with Intelligent CPU Module (DCON Protocol) (Gray Cover) (RoHS)
<b>RU-87P8-G CR</b>	8-slot RS-485 I/O Expansion Unit with Intelligent CPU Module (DCON Protocol) (Gray Cover) (RoHS)