



Features

- One USB Port
- Hot Swap Allowed
- Auto Configuration
- LED Indicators for Fault Detection
- DCON Protocol
- 1/2/4/8 I/O Slots for I-87K Modules
- Operating Temperature: -25 ~ +75°C



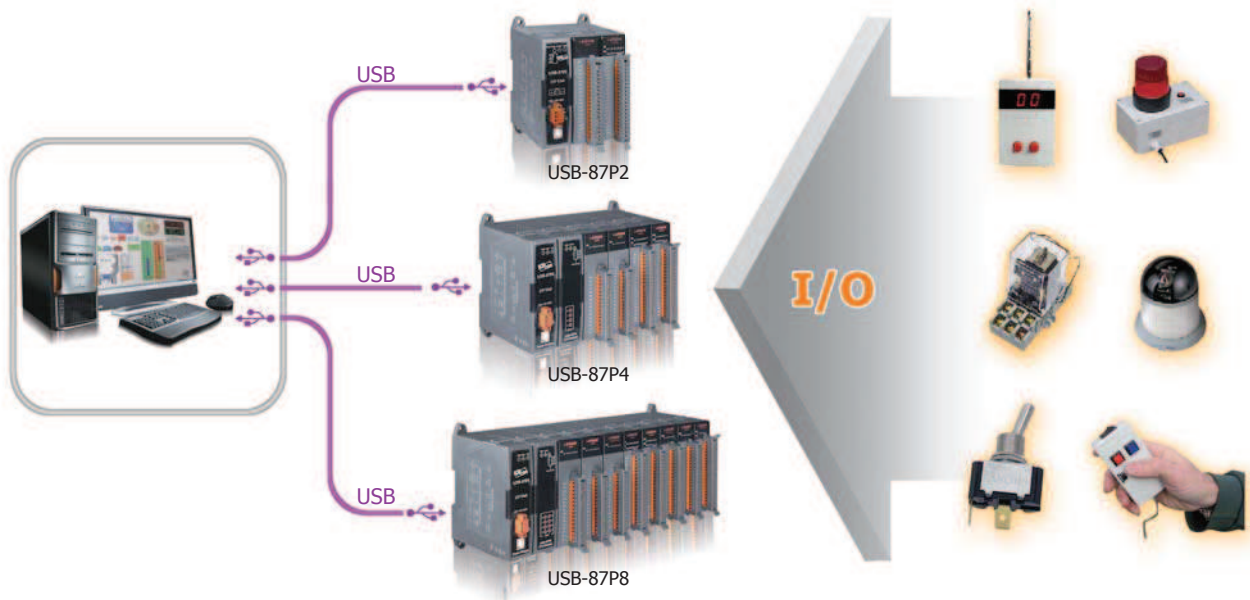
Introduction

USB-87Pn is an unit to expand I/O via the USB. It is designed to be used in harsh and noisy environment, so the hardware is manufactured with wide power input range (10 ~ 30 V_{DC}), isolated power input and can operate under wide temperature (-25 ~ +75°C). To simplify installation and maintenance of I/O modules, it provides many useful features, such as: hot swap allowed, auto configuration, LED indicators for fault detection, dual watchdog to keep alive, programmable power on and safe values for safety.

There are more than 30 I/O modules supported with the unit, including analog input/output, digital input/output, counter, frequency I/O modules. We provide various software development kits (SDK) and demos, such as DLL, ActiveX, Labview driver, InduSoft driver, Linux driver, OPC server, etc. The I-87K series I/O modules plugged in the USB-87Pn can be easily integrated into variant software system.

Applications

Rich I/O Expansion Ability

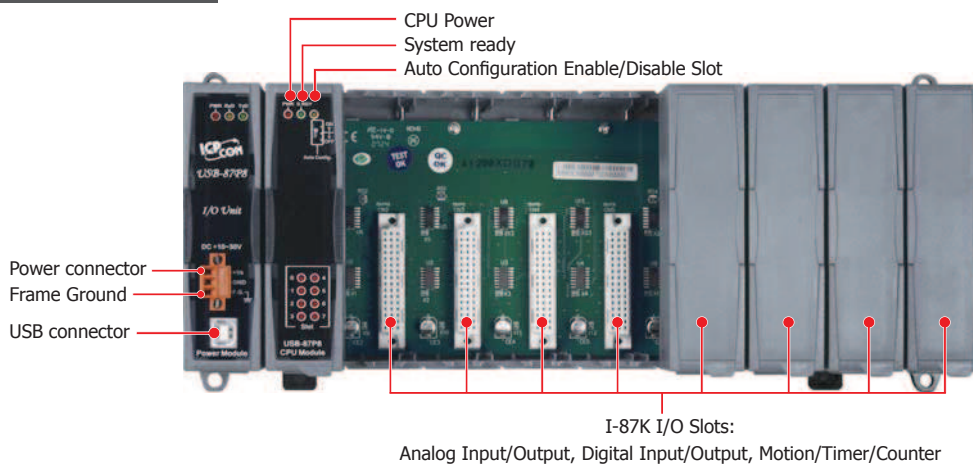


Specifications

| Models | USB-87P1 | USB-87P2 | USB-87P4 | USB-87P8 |
|--|---|-------------------------|--------------------------|--------------------------|
| Interface Type (Full speed with USB 1.1 specifications) | | | | |
| Cable | USB type A connector | | | |
| Baud Rate | 115200 bps Default | | | |
| Isolation | 3000 V _{DC} | | | |
| ESD Protection | +/-4 K Contact Discharge and +/-8 K Air Discharge | | | |
| Communication Protocol | DCON Protocol (ASCII Format) | | | |
| Switch | | | | |
| DIP Switch | 1-bit x 1, For auto configuration | | | |
| LED Indicators | | | | |
| Power | Yes | | | |
| System Ready | Yes | | | |
| Auto Configuration | Yes | | | |
| Slot Status | Yes | | | |
| I/O Expansion Slots | | | | |
| Hot Swap | Yes | | | |
| Auto Configuration | Yes | | | |
| Support Module Type | High profile I-87K module only | | | |
| Slots Numbers | 1 | 2 | 4 | 8 |
| Mechanical | | | | |
| Dimensions (W x L x H) | 64 mm x 120 mm x 110 mm | 95 mm x 132 mm x 111 mm | 188 mm x 132 mm x 111 mm | 312 mm x 132 mm x 111 mm |
| Installation | DIN-Rail or Wall Mounting | | | |
| Environmental | | | | |
| Operating Temperature | -25 ~ +75°C | | | |
| Storage Temperature | -30 ~ +80°C | | | |
| Ambient Relative Humidity | 10 ~ 90% RH (non-condensing) | | | |
| Power | | | | |
| Input Range | +10 ~ +30 V _{DC} | | | |
| Reverse Polarity Protection | Yes | | | |
| Isolation | 1000 V _{DC} | | | |
| Frame Ground | Yes | | | |
| Consumption | 1 W | 1 W | 2 W | 2.4 W |
| Power Board Driving | 5 W | 8 W | 30 W | |

Appearance

USB-87P8



Ordering Information

| | |
|-------------|-----------------------------------|
| USB-87P1 CR | 1 slot I/O Expansion Unit (RoHS) |
| USB-87P2 CR | 2 slots I/O Expansion Unit (RoHS) |
| USB-87P4 CR | 4 slots I/O Expansion Unit (RoHS) |
| USB-87P8 CR | 8 slots I/O Expansion Unit (RoHS) |

Accessories

| | |
|--------------|---|
| DP-660 | 24 V _{DC} /2.5 A, 60 W and 5 V _{DC} /0.5 A, 2.5 W Power Supply with DIN-Rail Mounting |
| DP-665 | 24 V _{DC} /2.7 A, 65 W Power Supply with DIN-Rail Mounting |
| DP-1200 CR | 24 V _{DC} /5.0 A, 120 W Power Supply with DIN-Rail Mounting (RoHS) |
| MDR-20-24 CR | 24 V _{DC} /1.0 A, 24 W Power Supply with DIN-Rail Mounting (RoHS) |