



iDCS-8830

8-slot Redundant Distributed Modular I/O System with
Modbus/TCP Server

Features

- Modbus/TCP Server
- PWR/Comm./IO module redundant design
- Supports 8 I/O module slots
(4 sets of I/O redundancy)
- Auto parameter setting when replacement
- Hot Swap for all modules



Introduction

The iDCS-8830 system is composed of 2 redundant power modules, 2 redundant communication modules and 8 I/O modules. It is designed as a modular remote redundant I/O system. The power module supports 24V_{DC} (±10%) power input, the communication module provides Modbus/TCP Server function, and the I/O modules can be set to 8 single or up to 4 sets of dual, supporting a variety of different input/output signal types for various applications. The I/O modules include analog current and voltage input/output, digital input/output, TC/RTD temperature measurement, counter and HART communication functions, etc. The I/O module can be quickly connected to on-site signals and wired for testing through the terminal board. In addition, all modules of iDCS-8830 are equipped with hot-swap replacement and automatic parameter setting functions to improve maintenance convenience.

Specifications

FPM-D2440		
Voltage input	24 V _{DC} ±20%	
Voltage output	5 V _{DC} ±2%, 24 V _{DC} (Depending on input power source)	
Current output	5 V _{DC} : 7.5A Max. 24 V _{DC} : 5A Max.	
Insulation resistance	1000 MΩ	
Short protection	Yes (Continuous)	
Redundancy	Yes	
Isolation	1500 V _{DC} Min.	
Operating Temperature	-25 ~ 75 °C	
Certification		
EMC	Emission	IEC 61000-6-4
	Immunity	IEC 61000-6-2
		IEC 61000-4-3
		IEC 61000-4-4
		IEC 61000-4-6
		IEC 61000-4-9
		IEC 61000-4-10
IEC 61000-4-12		

Specifications

FCM-MTCP		
LAN Port	10/100BASE-TX (Auto negotiating, Auto MDIX)	
Protocol	Modbus/TCP Server	
Redundant	Yes	
LED indicators	1 Power, 2 Fault, 1 Link/Active/Speed	
Isolation	3000 V _{DC} (LAN port and F.G) 1000V _{DC} (LAN port and backplane)	
Operating Temperature	-25 ~ 75 °C	
Certification		
EMC	Emission	IEC 61000-6-4
	Immunity	IEC 61000-6-2
		IEC 61000-4-3
		IEC 61000-4-4
		IEC 61000-4-6
		IEC 61000-4-9
		IEC 61000-4-10
IEC 61000-4-12		

Feature

The redundant I/O design of iDCS-8830 improves on-site monitoring security requirements, provides a variety of analog I/O, digital I/O, temperature, pulse and HART communications, and supports hot-swap and automatic parameter setting functions.

Hot-Swap

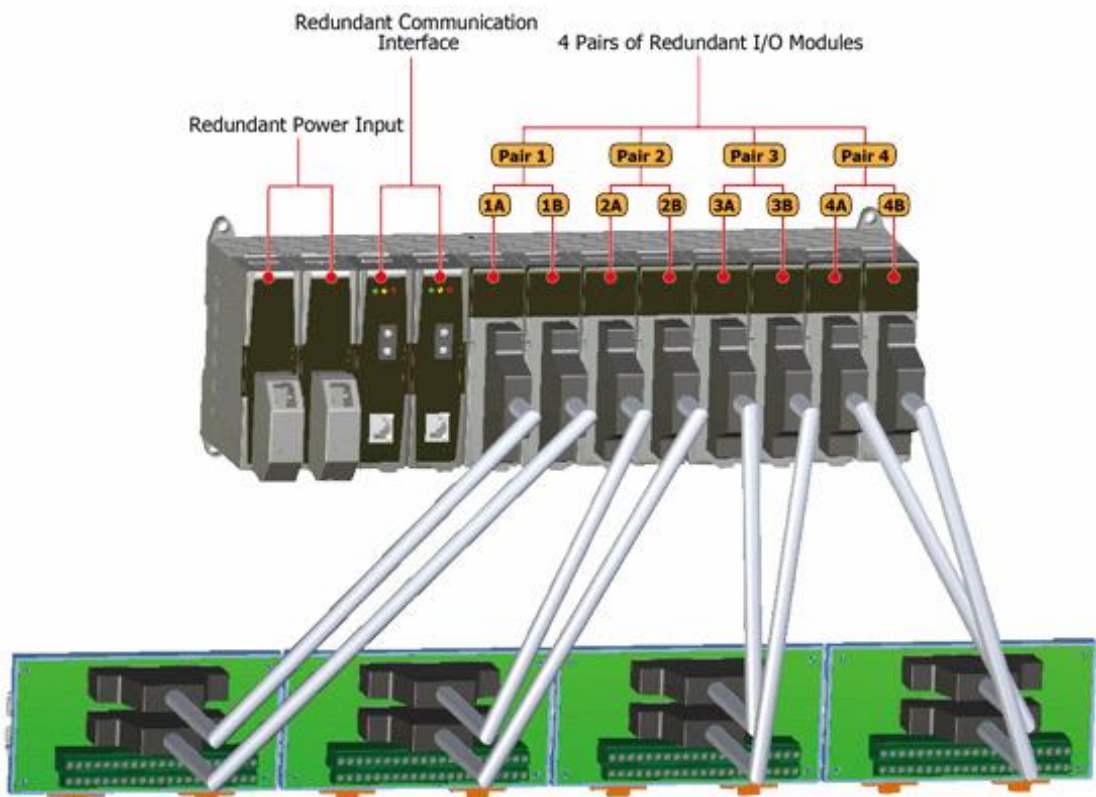
- Replace Devices without send the shutdown command.
- When remove module, System would not be stopped.
- MCU would update system status in the shortest time.

Auto Configuration

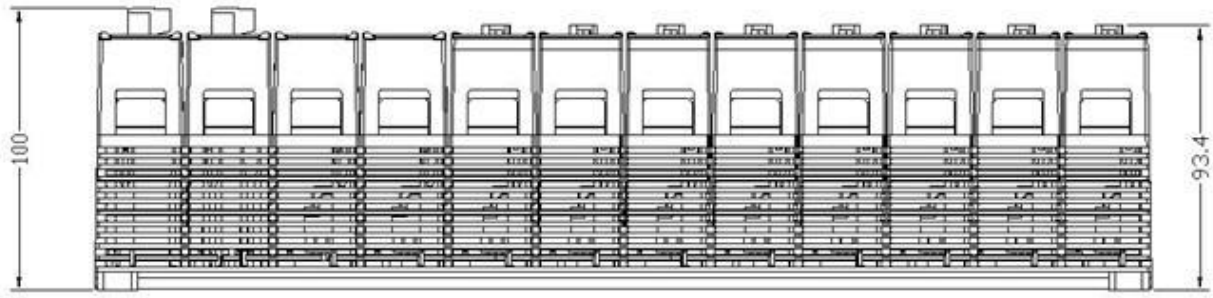
- When replace module, the MCU would auto configure to last setting.

**Flexible
Combination**

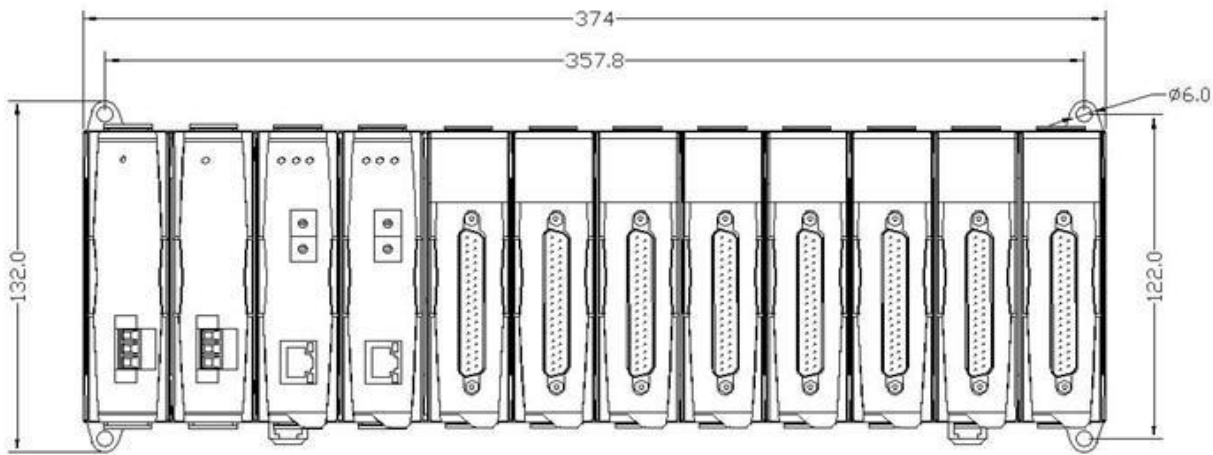
Appearance



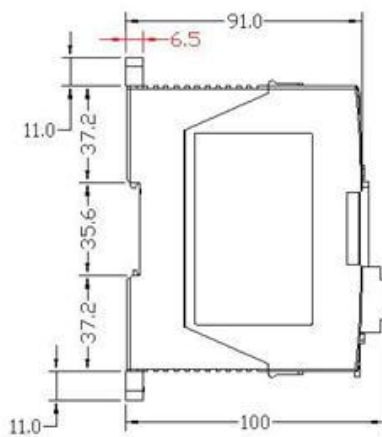
■ Dimension (unit: mm)



Top View



Front View



Left Side View

■ Ordering Information

<p>iDCS-8830 CR</p>	<p>8-slot Redundant Distributed Modular I/O System with Ethernet (RoHS) Includes 2x FPM-D2440 and 2x FCM-MTCP</p>
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