FDC600Y

Intelligent Field Communication Box

Brief Views

The intelligent field communication box is designed for use in open-air outdoor environments. It features all-weather outdoor electrical protection. By installing various business modules, it can achieve the convergence and transmission of multiple services. The shell is made of high-quality cold-rolled steel plate (galvanized plate/stainless steel plate is optional), offering attributes such as rainproofing, dustproofing, ventilation, heat dissipation, and corrosion resistance. The pole-holding structure design is convenient for quick installation. The built-in environmental parameter acquisition control module can turn on the fan to dissipate heat or start the heater to heat according to the temperature inside the box, and the external alarm light will send out an audible and visual alarm when the box door is illegally opened. The power redundancy backup design enhances the long-term reliability of the equipment.

Closed View

2pcs OLT module and
1pcs EYDFA module installed

1. Product Specification

1.1 OLT module specification

Refer to the OLT module FD1608Y-B0M datasheet

1.2 EYDFA module specification

Refer to the EYDFA module HF1915Y-B1M-1623W datasheet.

1.3 Environmental parameter acquisition control module specifications

Name	Parameter
Fan start temperature	50 °C
Heater start temperature	-5 °C

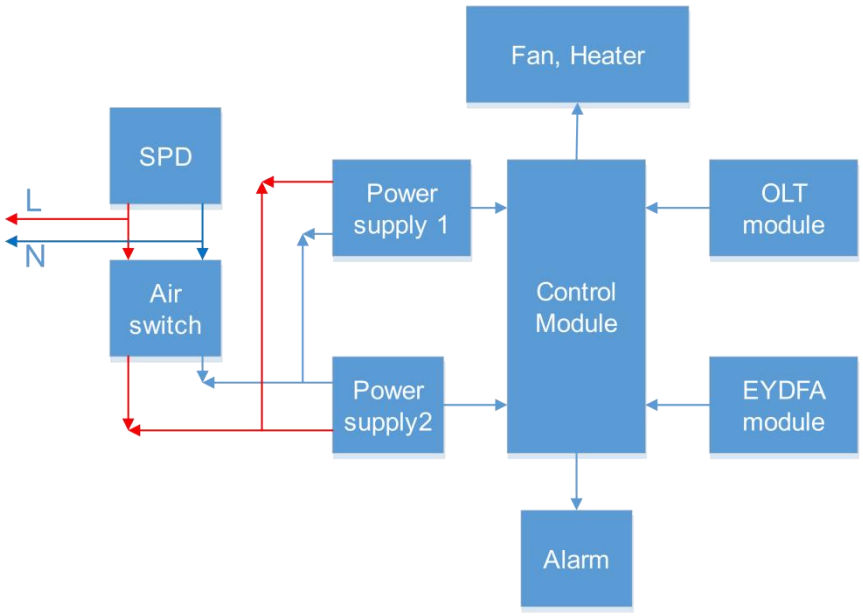
Environmental parameter acquisition control module definition		
Fan indicator light	Green light on (open)	Green light off (closed)
Heater light	Green light on (open)	Green light off (closed)
charge indicator	CHARGED	Green light on (fully charged)
	CHARGING	Green light on (charging)
Battery type selection switch	VRLA	Lead-acid battery
	li-lion	Lithium battery

1.4 Operating Specifications of Intelligent Field Communication Box

Name	MIN	MAX	Unit
Store temperature	-40	85	℃
Storage humidity	5	95	%
Operate temperature (with heater)	-25	65	℃
Operate temperature (no heater)	0	65	℃
Work humidity (non-condensing）	10	90	%
Power consumption (no heater)	NA	100	W
Power Specifications	MIN	typical value	MAX
AC input voltage	100V	220.0V	240V

2. Product hardware design specification

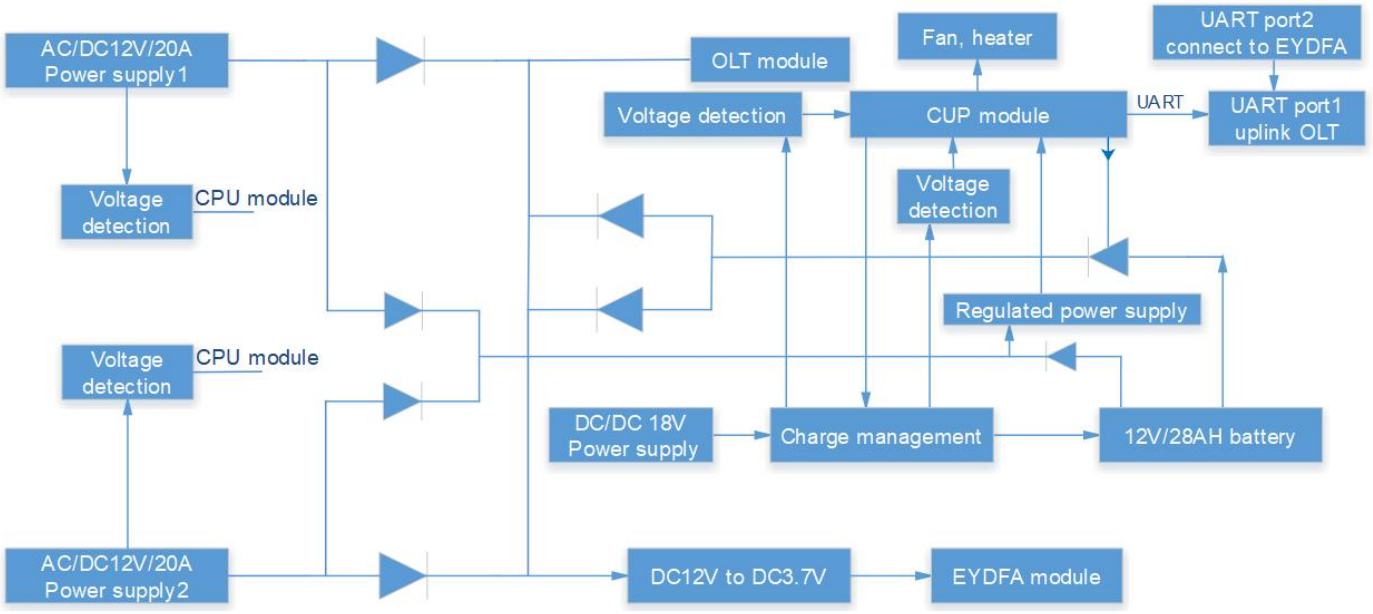
2.1 Hardware principle block diagram



This intelligent field communication box is mainly composed of the following modules:

OLT module, EYDFA module, power supply module, cabinet environment collection and control module, among which the cabinet environment collection and control module includes power redundancy backup, power-off battery life control, environment collection control, etc. circuit.

Principle block diagram of environmental acquisition control module



2.2 Key components

Key chip	Device Description
MCU	STC8A8K64D445I-LQPF48
Charge management	CN3765
Boost	XL6019

2.3 Main configuration of intelligent field communication box

Name	Quantity	Remark
OLT module	Max 2 (with EYDFA module)	Individually packaged
	Max 3 (without EYDFA module)	
EYDFA module	Max 1	Individually packaged
Fiber Distribution Module	Max 4	One 1*8 port module is configured by default
Air switch (32A)	1	
SPD	1	
Switching power supply	2	
Control Module	1	
FAN	1	
Heater (45W)	1	Optional
Battery (28AH)	1	Optional

Mechanics		
Bare metal Dimensions (length*width*height)	560*345*525mm	OLT module and EYDFA module are not installed
Bare metal weight	20 Kg	
Packing Dimensions (length*width*height)	760*655*535 mm	
Packed weight	36 Kg	