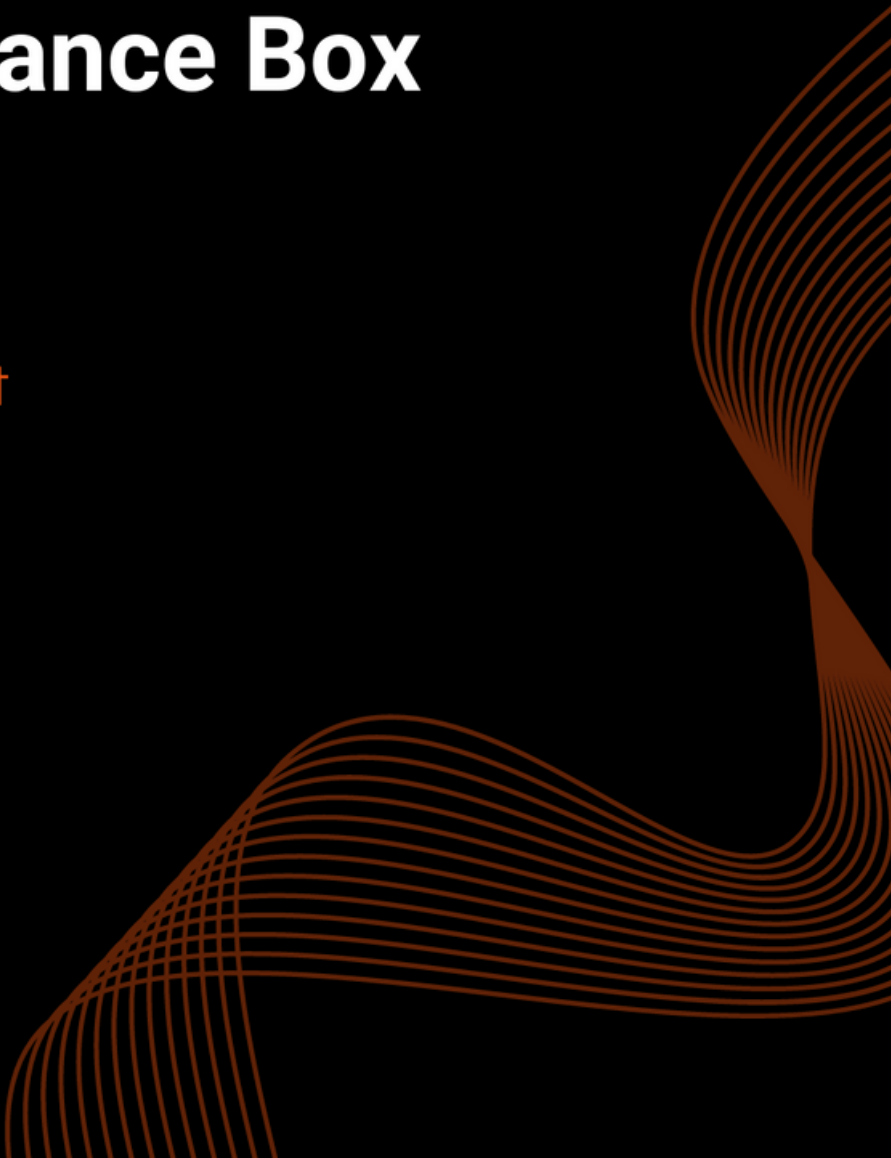# FIBERROAD

Smart
IoT Surveillance Box

Product Data Sheet

The Fiberroad Smart IoT Surveillance box is a cutting-edge solution that is tailor-made for outdoor surveillance scenarios. Its modular design allows for easy customization and scalability, making it the perfect fit for any IoT Surveillance network. With advanced technology packed into a sleek and compact package, this device offers unparalleled performance and reliability in monitoring outdoor environments. Whether you need to keep an eye on your property or enhance security measures in public spaces, the Smart IoT Surveillance box has got you covered. Its innovative features ensure seamless integration with existing systems, providing a comprehensive solution for all your surveillance needs. Trust Fiberroad to deliver top-notch quality and functionality with their state-of-the-art Smart IoT Surveillance box.

Fiberroad Smart IoT Surveillance Box

Product Features

Box material: galvanized plate, box thickness: 1.0mm; protection level: IP55, including box, temperature control fan, air switch, AC220V single-phase surge protective device, and Industrial Ethernet Switch module, Optical Distribution Frame, Door Magnetic Switch and access control linkage switching alarm output, RS485 expansion interface;

Support 4 pairs of AC220V output (current per pair up to 8A, total current up to 40A), each pair has independent control, with independent status indicator; support remote platform and stand-alone Web control, front-end hardware switch independent control;

2.0-inch TFT display screen, can show the status of the device (IP, MAC, firmware version, power status, temperature and humidity, access control, network status, etc.);

Support real-time monitoring and displaying the status information of box temperature, humidity, voltage, power, door, network, fan and so on;

Support controlling the restart of the intelligent control terminal and controlling the power output interface of the intelligent control terminal;

Support real-time monitoring of the equipment connection of network and power; When opening the door of the equipment box, the intelligent control terminal will turn on the light and and prompt the pop-up interface in the management software automatically;

When the temperature inside the equipment is too high, the input and output voltages are abnormal, overloaded, disconnected from the network, the fan is turned on, and the door of the box is opened, the alarm can be prompted by the management software in the form of voice and pop-up interface;

Management Functions:

1. Real-time display of running data inside the front-end box: temperature, humidity, voltage, current, power consumption, fan, network disconnection, box door status, and other information;

2. Remote control function for the front-end equipment box (including front-end equipment box reset, control of each power output);

3. Definition of fault alarm types and ready-to-judge fault type of function;

4. Automatic and manual dispatching of fault information handling function;

5. Support for automatic generation of regional network topology based on business area ownership, equipment box area ownership, and equipment hierarchy relationship;

6. Data presentation function: visualization of key business indicators such as device online rate, fault trends, system health score percentage, alarm category statistics, alarm level, currently alarming devices, electronic maps, etc.;

7. Support for alarm function, support for one-click positioning and navigation of fault points;

8. The platform has system management, equipment management, alarm settings, statistical report settings, superior platform management, and can set system logo, system name. It can manage and set project information and area information, including project name, project administrator, project latitude and longitude, user information, designer information, maintenance company information, project address, intelligent box data, camera data, network operator and other functions;

9. Historical fault record and dispatch status query function;

10. Automatic generation of operation and maintenance assessment report function;

11. Support for electronic map function, which can be loaded on the map, to view and control the current status of the equipment;

12. Support for alarm log and fault calculation, which are exportable;

13. Support for log recording function, and the log can be queried according to time and event category;

14. Support organizational structure management, user management, role management, resource management of menu, and permission management;

Network Management Software Functions

15. Active discovery of equipment box function, can actively search and discover smart equipment boxes within the same network and can configure and modify the equipment box;

16. Support for image quality analysis and detection function, not less than 5 types (video signal loss, video occlusion, stripe interference, snowflake noise, color distortion, etc.);

17. The platform meets the requirement of 7x24h uninterrupted operation; It can meet the requirement of managing performance of no less than one hundred thousand front-end equipment boxes, and it can run on Windows and Linux environments.

Equipment Parameters:

High Voltage Parameters

Rated Voltage	AC 220V/50HZ
Rated Current	16A
Input Power	AC100V-AC240V
Automatic Reclosing Function	Equipped with under-voltage, over-voltage, over-current and leakage protection functions; supports remote WEB configuration and remote leakage testing

Strong Lightning Protection

Maximum Current	20KA, (40KA、60KA，80KA,100KA,120KA opption)
Rated Voltage	220VAC
Maximum Working Voltage	385VAC
Response Time	<25NS

Network Characteristics

Optical Fiber Port	1x SFP Slot, 100/1000Mbps
Copper Port	5x 10/100/1000Base-T RJ45 Ports

Network Characteristics

Network Management Function	Supports real-time monitoring of optical module wavelength, rate, transmitting power, receiving power, temperature and voltage; Supports network port rate, port status and port traffic statistics monitoring; Supports port VLAN, Qos, bandwidth control, MAC binding; Supports WEB and SNMP management
Protocol Standards	IEEE802.3 10Base-T、IEEE802.3u 100Base-TX、IEEE802.3x Flow Control
Lightning Protection of Electrical Port	ITU-TK21：10/700μs 6KV(40Ω)

Centralized Power Supply of Output Power

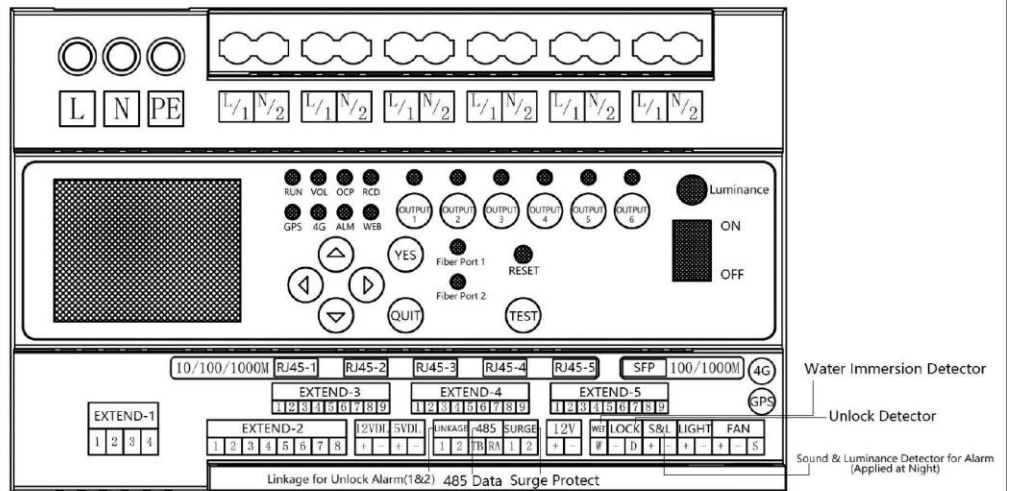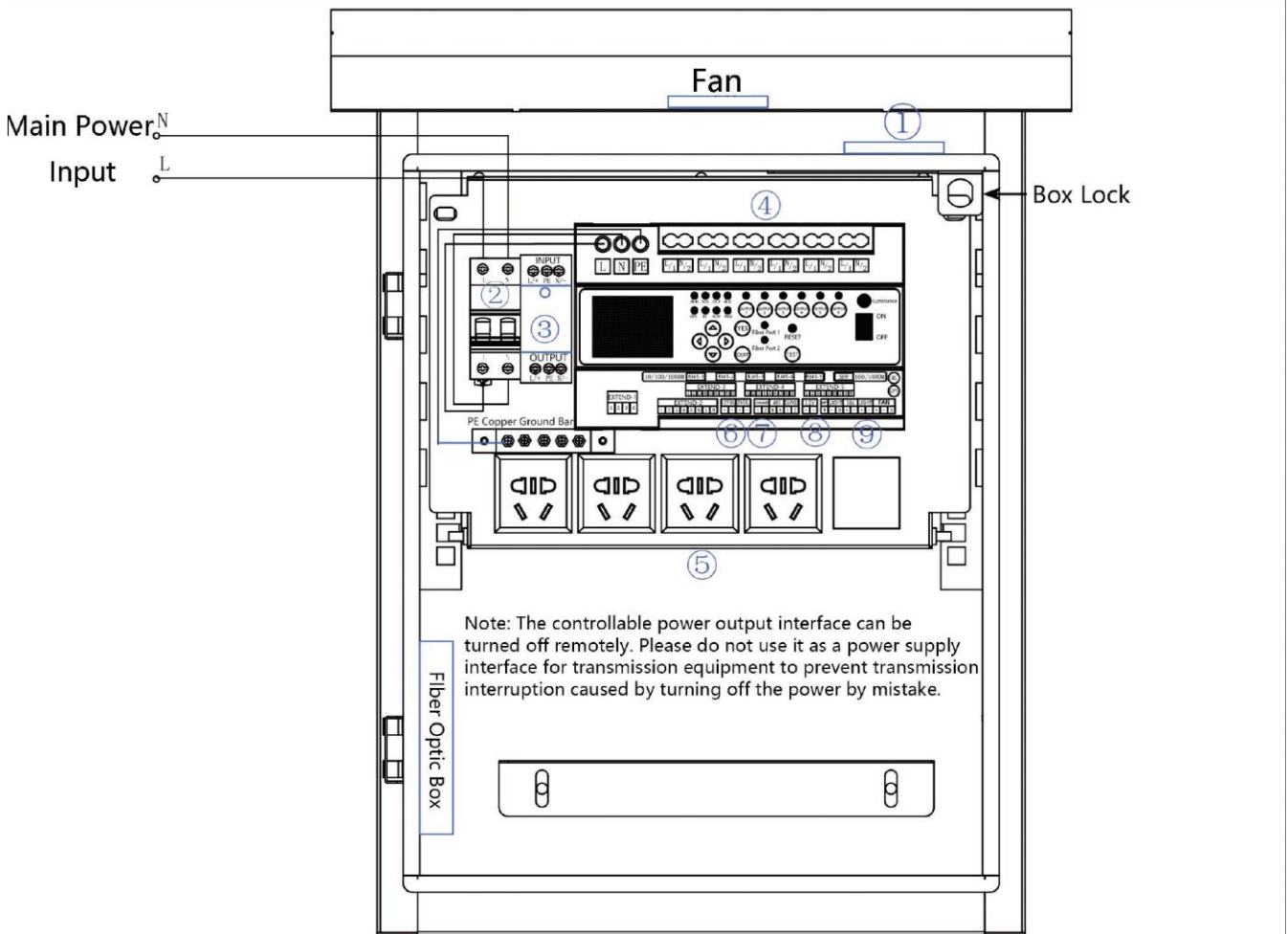|	
AC220V Power Port	4 groups of AC220V output (maximum current of a single group is 8A, maximum total current is 40A); Supports independent control of each group, and has independent status indicators; Supports independent control of remote platforms and stand-alone WEB, and supports independent control of front-end hardware switches;
DC12V Power Port	One DC12V and One DC5V delayed power supply port, which can be controlled remotely

Display Screen

Display Screen	Equipped with a 2.0-inch TFT display screen, which can display device status (IP, MAC, firmware version, power status, temperature and humidity, access control, network status, etc.)

Interface

Water Immersion Connector	support
Lighting Connector	Support
Alarm Connector	support
Fan Connector	support
Access Control Connector	support
Other Expansion Function	RS485,I/0 input and output interface, analog, 4G, GPS, tilt vibration, heater can be expanded

Other Parameters

Input Power	AC100V-AC240V
Dimension	500mm*400mm*200mm （height*width*depth）
Operating Temperature	-20℃-75℃

Fan

Main Power Input

Box Lock

Note: The controllable power output interface can be turned off remotely. Please do not use it as a power supply interface for transmission equipment to prevent transmission interruption caused by turning off the power by mistake.

Fiber Optic Box

PE Copper Ground Bar

1: LED(for illumination)

2: Main Power Switch

3: Power network two-in-one lightning protector

4: Contorllable Power Output (6 x AC 220V)

5: AC 220V Socket

6: Optical transmission power output (DC12V+DC5V) (Remote Restart)

7: Unlock Alarm Output (Linkage 1) (Linkage 2)

8: 5x RJ45 1000M

9: 1x SFP 1000M

Water Immersion Detector

Unlock Detector

Sound & Luminance Detector for Alarm (Applied at Night)

Linkage for Unlock Alarm(1&2)   485 Data   Surge Protect

Fiberroad Technology Co.,Ltd

Smart IoT Surveillance Controller Box