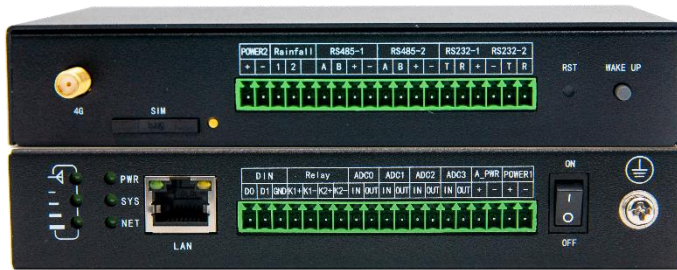# Technical Specification for SeRTU200 Telemetry Terminal

VERSION NUMBER:**V2.1**

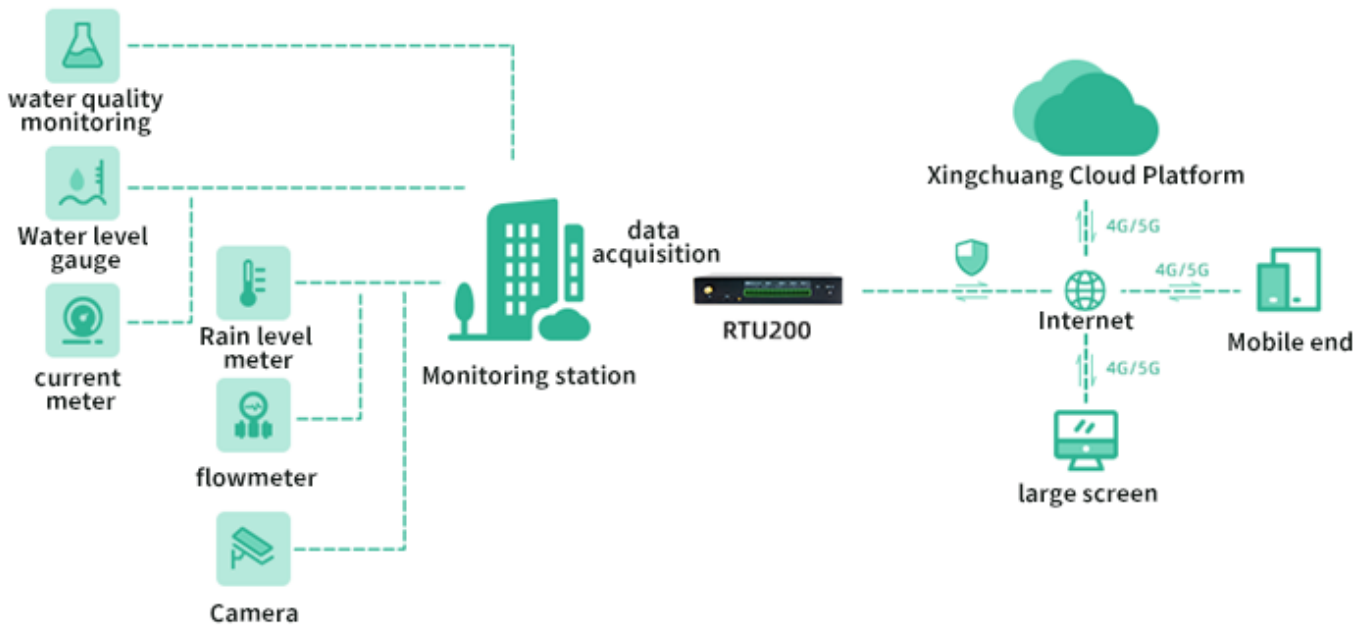XIAMEN KEY-IOT TECHNOLOGY CO., LTD

www.key-iot.com

Product Overview

The SeRTU200 series is a multi-functional telemetry terminal that integrates data collection with various communication functions such as 4G/NB-IoT, LoRa, and GPS. Equipped with rich acquisition control interfaces, the device provides RS232, RS485, Ethernet, analog input, digital input, digital output, and relay functions. The product is designed with user-friendly features, rich functionality, and can achieve long-term continuous automatic data collection in various environments, with real-time automatic reporting. It realizes comprehensive functions such as data collection, storage, display, control, alarm, and transmission for ecological environment monitoring, pollution source monitoring, etc.

Product Features

- No wiring required, flexible networking, plug and play

- Multi-channel image capture

- Supports remote query of local data

- Supports local serial port configuration and upgrades

- Remote query of current rainfall, water level, water flow, water quality, and other data

- Supports three-in-one functions of image monitoring + water conservancy data collection + wireless communication transmission

- Supports functions such as rainfall collection, warning trigger, local storage, and scheduled reporting (rainfall, water level, water flow, water quality, and other data)

- Supports remote management, upgrades, and configuration via cloud platform

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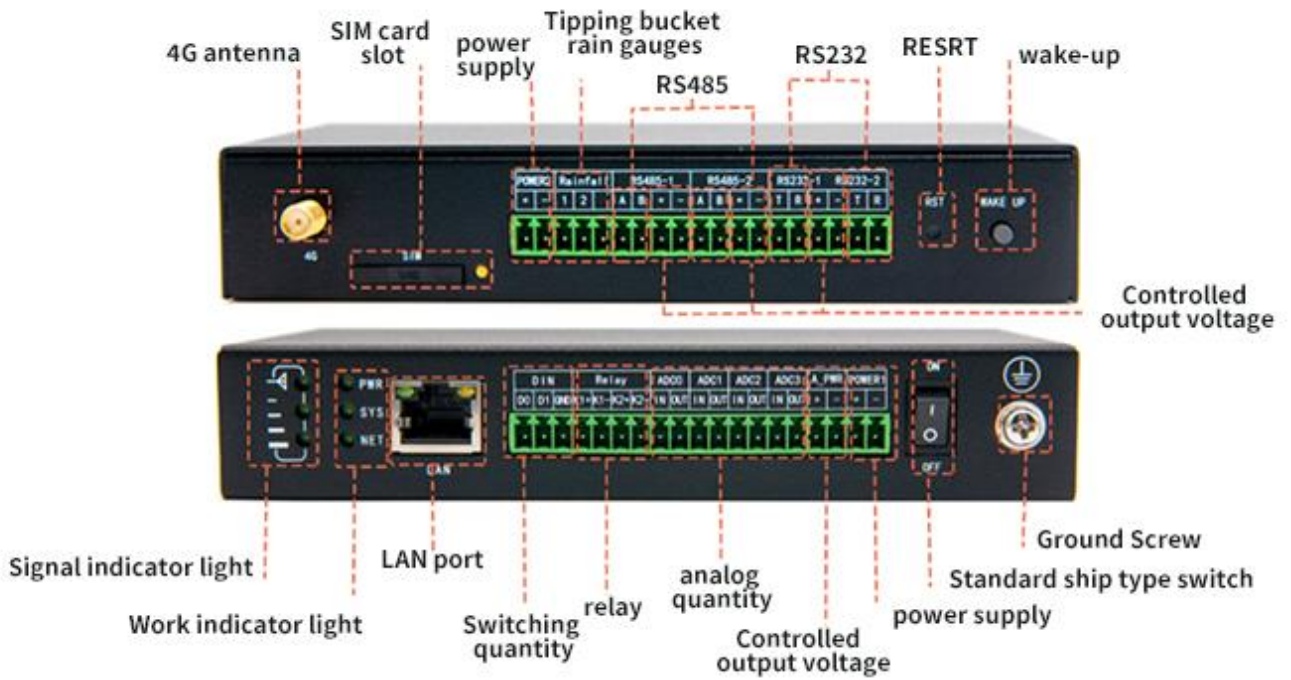KEY-IOT

Topology Diagram

Technical Parameters

Hardware Specifications	Parameter Details
SPI·FLASH	16M
Industrial Serial Interface	2*RS232，2*RS485
RTC	Supported
Hardware Watchdog	Supported
Ground Terminal	M4 screw grounding protection terminal
Gigabit Ethernet	1 Gigabit Ethernet port
4G Module	PCIE interface, USB2.0 signal
Interface Requirements	4-channel analog input interface (12-bit AD, supports 4-20mA current signal input, optional 0-5V voltage signal input)
	2-channel digital input interface (opto-isolated) Logic 0: Wet node 0-3VDC or dry node conduction Logic 1: Wet node 5-30DC, or dry node open
	2-channel relay output interface Maximum switching voltage:30VDC/220VAC Maximum switching current: 4A Maximum switching power:120W/880VA

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	4-channel controlled output power supply (the output voltage is the same as the device power supply voltage, default 12V. The rated output current for a single channel is 1A, and the total rated output current for 4 channels is 2A, with built-in overcurrent protection)
	1 tipping bucket rain gauge interface
Antenna	Standard SMA female antenna interface, characteristic impedance 50 ohms
SIM card slot	1 drawer-type SIM card slot, supports 1.8W/3V SIM/UIM card
Indicators	1 PWR light, 1 SYS light, 1 online light, 3 signal strength lights
RESET button	1
Wake-up button	Universal touch switch
Power voltage	DC 5-36V
Power interface	1.industrial terminal interface, with built-in power reverse protection and overcurrent/overvoltage protection 2. power inputs, software can detect whether the power is in place
Power switch	Standard boat-shaped switch
Temperature	Storage temperature -40°C 85°C, operating temperature -35°C75°C
Humidity	Operating 5%-90% (non-condensing)
Certification	Complies with CCC, RoHS
Fan design	Fanless silent design
Protection level	IP30
Rail	Supports, desktop
Dimensions	Length*width*height:154mm* 73.6mm* 27.9mm(excluding antenna mounting accessories)

Product Interfaces

Product Dimensions