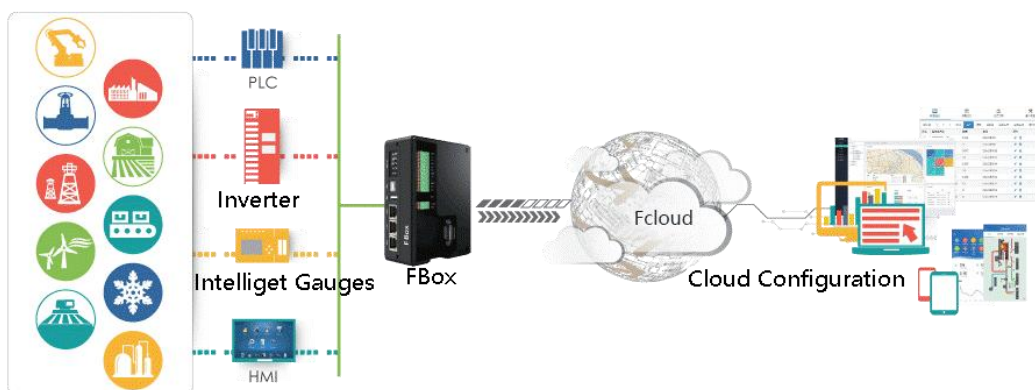# Flexem IIoT FBOX Series Product

# FBox-4G

- 350+ industrial protocols connection, and it supports most industrial devices connection.
- Local data analysis can be finished and pushed to cloud server.
- It supports edge calculation, and you can realize data calculation locally.
- It supports Flexem remote managing tool, remote equipping and diagnosis.
- It supports PLC program uploading, downloading and monitoring.
- It supports historical data local cache.
- With 4G router function, to provide network for other devices

## Products Overview

FBox series products are local intelligent data collection terminals of industrial IIoT platform pushed by Flexem, which can realize on-site devices remote data collection, remote downloading and maintenance. It supports over 350 industrial devices drives protocols, various communication connections to most industrial controller devices. It supports variable internet ways and Flexem cloud server, and you can realize remote equipping, diagnose and managing functions.
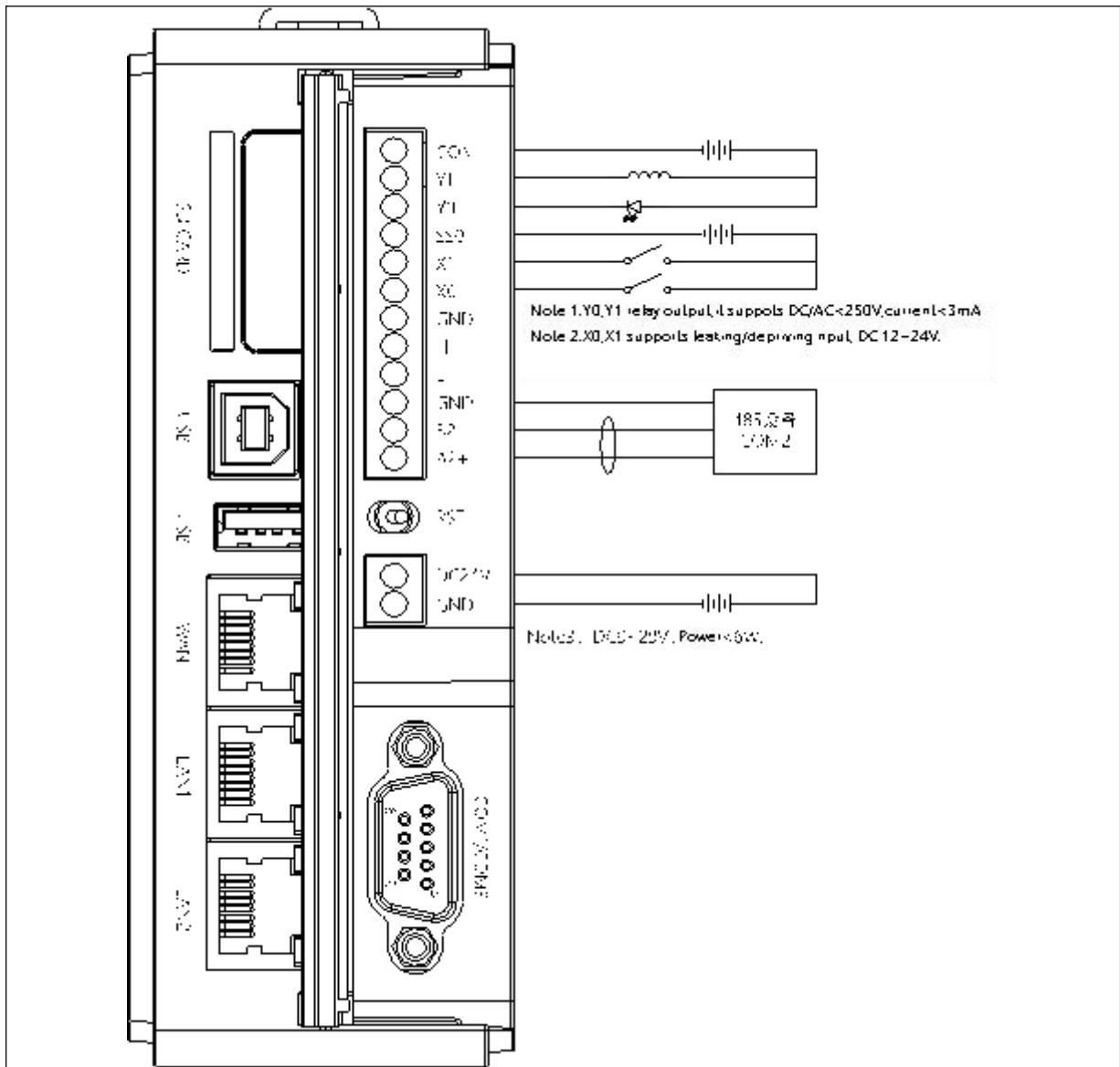
## Specifications

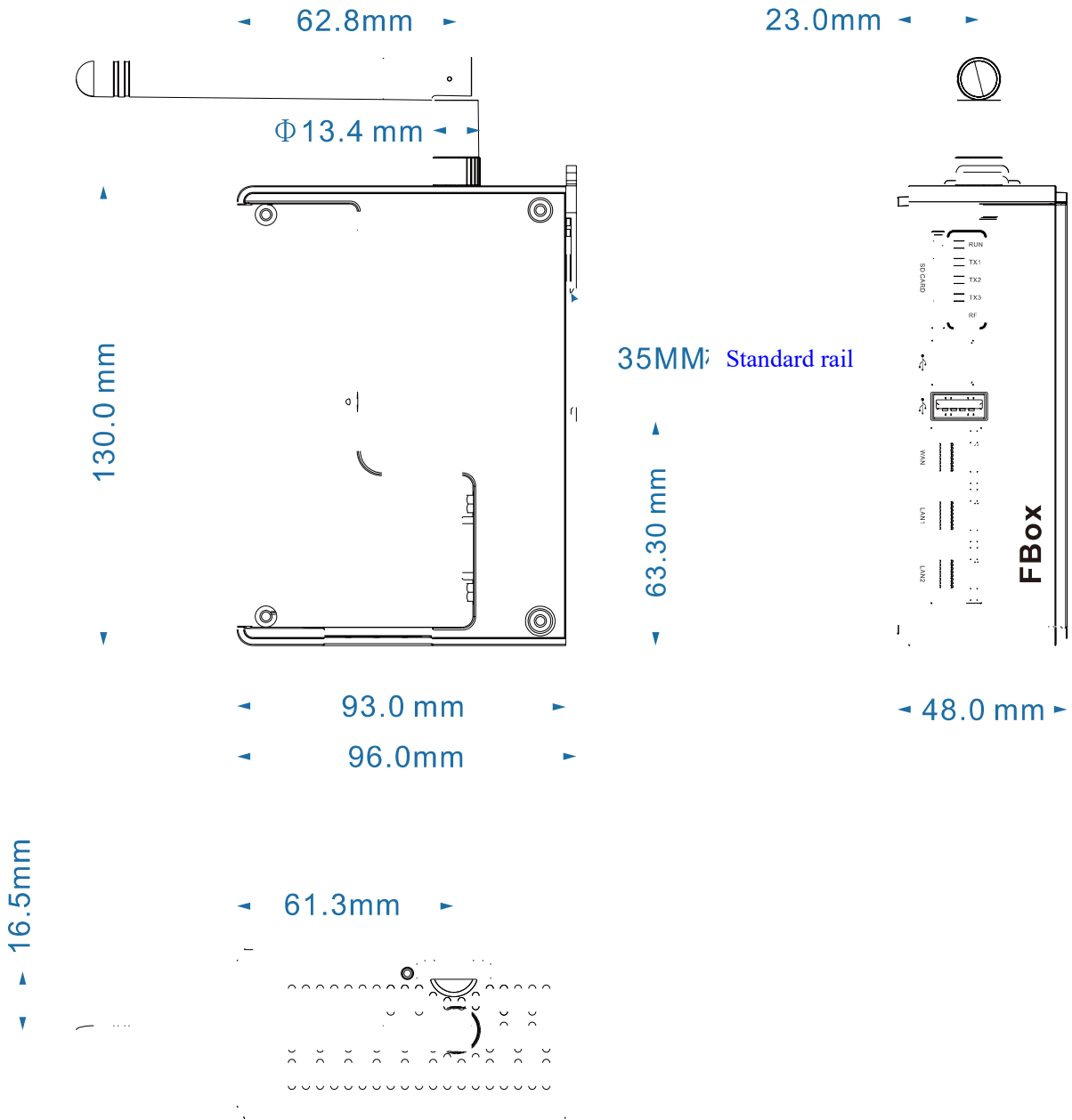| | | |
|---|---|---|
| Hardware | Network access | Ethernet<br>Mobile 2G/ Unicom 2G/Telecom 2G<br>Mobile 3G/ Unicom 3G/Telecom 3G<br>Mobile 4G/ Unicom 4G/Telecom 4G |
| | CPU | 600MHz ARM Cortex-A8 |
| | Storage | 128MB Flash + 128MB DDR3 |
| | Ethernet | 3 lines of 10M/100M Ethernet Port |
| | SD Card Port | Available |
| | USB Port | USB Device 2.0*1, USB Host 2.0*1 |
| | IO Port | 2-line optoelectronic isolated digital input, 2-line relay output (Maximum5A) |
| | COM Ports | COM1: RS232/RS485/RS422<br>COM2: RS485<br>COM3: RS232 |
| | Network Frequency Range | LTE FDD: B1/B3/B5/B8 LTE TDD: B38/B39/B40/B41 WCDMA: B1/B8 TD-SCDMA: B34/B39 CDMA: BC0 GSM: 900/1800MHz |
| | RTC | Built-in |
| Electrical Specifications | Power Consumption | < 5W |
| | Input Power | DC24V,working range DC 9V~28V |
| | Power Protection | Protected from thunder strike and surging |
| | Power Down Allowed | < 3mS |
| | CE & RoHS | Complied with EN61000-6-2:2005, EN61000-6-4:2007, RoHS, Surge Immunity:±1KV, EFT:±2KV,ESD:4KV, Air:8KV |
| Environment Specifications | Working Temperature | -10~60℃ |
| | Storage Temperature | -20~70℃ |
| | Environment Humidity | 10~90%RH (non condensation) |
| | Anti-vibration | 10~25Hz (X/Y/Z direction 2G/30 minutes) |
| | Cooling | Natural air cooling |
| Mechanic Parameters | Dimension | 130mm×94mm×48mm(without arial) |
| | Weight | About 320g |
| | Material | Engineering plastics |
| Software Parameters | VPN transparent transmission | Available |
| | Data Monitoring | 500 points, it supports timing uploading or variable uploading. |
| | Alarming Push | 200 points, it supports clients push, SMS push (20 items free everyday), wechat public NO push. |

| | Historical Data | 100 points, it supports offline transfer, each point can store 50000 items when offline, and the data can be kept for 180 days |
|---|---|---|
| | Edge Calculation | It supports scripts programming. |
| | Network Protocols | It supports over 100 industrial devices protocols. |
| | Managing& Maintenance | It supports firmware upgrading remotely, and equipping files lead in/out |

## Wiring Definition



| Pin5 | Pin9 |
|------|------|
| Pin1 | Pin6 |

| Pin1 | Rx-(B) (COM1 RS485-2/4) |
|------|------|
| Pin2 | RxD_PLC (COM1 RS232) |
| Pin3 | TxD_PLC (COM1 RS232) |
| Pin4 | Tx- (COM1 RS485-4) |
| Pin5 | GND |
| Pin6 | Rx+(A) (COM1 RS485-2/4) |
| Pin7 | RxD_PC/PLC (COM3 RS232) |
| Pin8 | TxD_PC/PLC (COM3 RS232) |
| Pin9 | Tx+ (COM1 RS485-4) |

Tel：4008-033-022
Website：www.flexem.com
We will push devices intellectualization step by step . 4

## Size

62.8mm

23.0mm

Φ13.4 mm

130.0 mm

35MM Standard rail

63.30 mm

RUN
SD CARD
TX1
TX2
TX3
RF

WAN
LAN1
LAN2

FBox

93.0 mm

96.0mm

48.0 mm

16.5mm

61.3mm

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