



## Introduction

FBS-CBES is an Ethernet and IoT communication board for FATEK FBS series PLC.

FBS-CBES series is a small size CPU communication expansion board that does not occupy additional module space. Through this FBS-CPU expansion board, PLC can directly apply to FATEK IoT services without the need of Gateway or HMI\*. In addition to IoT applications, by setting the device's IP you can also actively (client mode) or passively (server mode) communicate with other controller or computer through Ethernet.

This expansion board is suitable for all FBS-CPU modules. With this expansion board, remote monitoring and diagnosis of PLCs can be easily achieved.

When operating, this expansion board will occupy the Port 1 and Port 2 communication ports of the host. Port1 is fixed to FATEK server operation mode, which can be used for editing and debugging ladder programs. Port2 is used to support Modbus-TCP server operation mode and FATEK client operation mode. When in operation mode, Port1 and Port2 communication parameters will be automatically planned according to the set operation mode.

## Features

- Support FATEK IoT Services\*
- Multi-client accessible
- Modbus Server operation mode
- FATEK Server and Client operation mode
- IP-based access control
- TCP/IP support 8 connections(Server operation mode)

## Specification

### Network Specification

**Network interface**- 10/100BaseT

**Network protocol**- TCP/IP

**Application protocol**- FATEK, Modbus/TCP, DHCP, DNS, NetBIOS.

**PLC interface**- Port1, Port 2

**PLC interface speed**- 307.2Kbps

**Operating mode**- Server and client

**Application ports**- Modbus-TCP – 502, FATEK – 500

**Security mechanism**- IP-based access control

Configuration methods-via Ethernet with utility program.

**Firmware update method**-via Internet

### IoT Specification

iMonitor- Supported 10 dataitems limited.

iAccess- No Supported.

### Common Specification

**Indicator(s)** : LINK/ACT(Green LED) 、 SPEED(Red LED)

**Internal Power Consumption**: 5V, 250mA

**Operating Temperature** : 5~55°C

**Storage Temperature** : -25~70°C

\*FBS-CBES is forward compatible with FBS series PLC produced after 2016 (OS V4.51 and above)

\*If FBS-CBES is installed on an incompatible FBS CPU, the CPU will stop and show an error code (R4049=13, (Y0,Y1,Y2,Y3)=(1,0,1,1))