

On PLC Expansion Module Specifications

General Communication Boards/Modules



Specification	Model	FBS-CB2	FBS-CB22	FBS-CB5	FBS-CB55	FBS-CB25
RS232 Port		1 port (Port2)	2 ports (Port1, Port 2)	—	—	1 port (Port1)
RS485 Port		—	—	1 port (Port2)	2 ports (Port1, Port 2)	1 port (Port2)
Indicators		Each Port has its own TX, RX LED indicators				
Wiring mechanism		DB9F	DB9F	3 pins spring terminal		DB9F, 3 pins spring terminal
Installation position		Expansion slot of main unit				

Left Side Expansion Module Specifications

Ethernet Communication Boards/Modules



Specification	Model	FBS-CBEH	FBS-CBE	FBS-CM25E	FBS-CM55E
Network interface		10/100 Base T		10 Base T	
Network protocol		TCP/UDP/IP, ICMP, ARP			
Application protocol		FATEK client and server mode, Modbus-TCP client or server mode		FATEK client and server mode, Modbus-TCP server mode	
PLC interface		Port1, Port2		Port4	
PLC communication speed		307.2 Kbps	115.2 Kbps	9.6K / 19.2K / 38.4K / 57.6K / 115.2Kbps / 230.4Kbps	
Expansion communication interface		N/A		RS232 (Port3), RS485 (Port4)	RS485 (Port3, Port4)
Application IP port number		FATEK port number 500, Modbus-TCP 502 or customized			
Security protection		IP based access control			
Indicators		Internet RX, TX, LINK LEDs indicators			
Wiring mechanism		RJ-45		DB9F, spring terminal block 4-pin x1, 3-pin x1	Spring terminal block 4-pin x1, 3-pin x1
Dimension (Installation position)		Expansion slot of main unit		Figure 5	

CANopen® Communication Board



Specification	Model	FBS-CBCAN
Communication standard		CAN 2.0A CANopen
Network topology		3-Phase fieldbus
Communication speed		10K / 20K / 50K / 125K / 250K / 500K / 1Mbps
Maximum number of connection station		127 stations
Method of sending signal		Event or cyclic transmission
Isolation method		Optical (signal) isolation, 500VAC, 1 minute
Number of PDO communication		RXPDO-10, TXPDO-10 total up to 80 registers
Number of SDO channels		Client -1, Server-1
Error control		Heartbeat
Wiring mechanism		3-pin spring terminal block
ID setup method		Same as PLC station number or setup by software
Working mode		Master or slave dual modes
Installation position		Expansion slot of main unit

ZigBee™ Communication Modules



Specification	Model	FBS-CMZB	FBS-CMZBR
Standards		Based on IEEE 802.15.4 and ZigBee™ standard	
Network topology		Mesh, Star, and Cluster-tree	
Frequency		2.4GHz, Unlicensed ISM Band	
Modulation		QPSK	
Data rate		250 Kbps	
RF channels		16(5MHz)	
Data encryption		AES(option)	
Transmit power		-7~18dBm	
Transmission distance		1200m (LOS)	
Nodes		Maximum 65535	
Communication interface		Port3	—
Power consumption		24VDC, -15%/+20%, 2W	
Dimension		Figure 5	62 x 54 x 29 (mm)

GSM Communication Module



Specification	Model	FBS-CMGSM
Function		SMS, GPRS, and dial up data transfer (CSD), and etc
Frequencies		850/900/1800/1900MHz
RF power		2W
Communication interface		Port3
Dimension		Figure 5

General Purpose Communication Modules



Specification	Model	FBS-CM25C	FBS-CM5R	FBS-CM5H
Function		General purpose RS232 to RS485 bi-directional signal converter	General purpose RS485 repeater	General purpose 1 to 3 RS485 HUB
Indicators		Each port has its own independent TX, RX LED indicator		
External power		24VDC, -15%/+20%		
Wiring mechanism		DB9F, 3.81mm European terminal block	3 pins spring terminal block	7.62mm fixed terminal block
Dimension		Figure 5		Figure 4