FBs Model List

Module Name			Specifications
Main Units	Basic Main Units	FBs-10MA◇△–◎–C	6 points 24VDC digital input (2 points high speed 100KHz, 2 points medium speed 20KHz, 2 points medium speed total 5KHz); 4 points relay or transistor output (2 points high speed 100KHz, 2 points medium speed 20KHz); 1 RS232 or USB port(expandable up to 3); I/O is not expandable
		FBs-14MA◇△–◎–C	8 points 24VDC digital input (2 points high speed 100KHz, 2 points medium speed 20KHz, 4 points medium speed total 5KHz); 6 points relay or transistor output (2 point high speed 100KHz, 4 points medium speed 20KHz); 1 RS232 or USB port(expandable up to 3); I/O is not expandable
		FBs-20MA◇△–◎–C	12 points 24VDC digital input (2 points high speed 100KHz, 4 points medium speed 20KHz, 6 points medium speed total 5KHz); 8 points relay or transistor output (2 points high speed 100KHz, 6 points medium speed 20KHz); 1 RS232 or USB port(expandable up to 3)
		FBs-24MA◇△–◎–C	14 points 24VDC digital input (2 points high speed 100KHz, 6 points medium speed 20KHz, 6 points medium speed total 5KHz); 10 points relay or transistor output (2 points high speed 100KHz, 6 points medium speed 20KHz); 1 RS232 or USB port(expandable up to 3)
		FBs-32MA◇△–◎–C FBs-32MB◇△–◎–C	20 points 24VDC digital input (2 points high speed 100KHz, 6 points medium speed 20KHz, 6 points medium speed total 5KHz); 12 points relay or transistor output (2 points high speed 100KHz, 6 points medium speed 20KHz); 1 RS232 or USB port(expandable up to 3); (MB is detachable terminal block)
		FBs-40MA◇△–◎–C FBs-40MB◇△–◎–C	24 points 24VDC digital input (2 points high speed 100KHz, 6 points medium speed 20KHz, 6 points medium speed total 5KHz); 16 points relay or transistor output (2 points high speed 100KHz, 6 points medium speed 20KHz); 1 RS232 or USB port(expandable up to 3); (MB is detachable terminal block)
		FBs-60MA◇△–◎–C FBs-60MB◇△–◎–C	36 points 24VDC digital input (2 points high speed 100KHz, 6 points medium speed 20KHz, 6 points medium speed total 5KHz); 24 points relay or transistor output (2 points high speed 100KHz, 6 points medium speed 20KHz); 1 RS232 or USB port(expandable up to 3); (MB is detachable terminal block)
	Advanced Main Units	FBs-10MC◇△–◎	6 points 24VDC digital input (2 points high speed 200KHz, 2 points medium speed 20KHz, 2 points medium speed total 5KHz); 4 points relay or transistor output (2 points high speed 200KHz, 2 points medium speed 20KHz); 1 RS232 or USB port (expandable up to 5); built-in RTC; I/O is not expandable
		FBs-14MC◇△–◎	8 points 24VDC digital input (2 points high speed 200KHz, 2 points medium speed 20KHz, 4 points medium speed total 5KHz); 6 points relay or transistor output (2 points high speed 200KHz, 4 points medium speed 20KHz); 1 RS232 or USB port (expandable up to 5); built-in RTC; I/O is not expandable
		FBs-20MC◇△–◎	12 points 24VDC digital input (4 points high speed 200KHz, 2 points medium speed 20KHz, 6 points medium speed total 5KHz); 8 points relay or transistor output (4 points high speed 200KHz, 4 points medium speed 20KHz); 1 RS232 or USB port (expandable up to 5); built-in RTC; detachable terminal block
		FBs-24MC◇△–◎	14 points 24VDC digital input (4 points high speed 200KHz, 4 points medium speed 20KHz, 6 points medium speed total 5KHz); 10 points relay or transistor output (4 points high speed 200KHz, 4 points medium sped 20KHz); 1 RS232 or USB port (expandable up to 5); built-in RTC; detachable terminal block
		FBs-32MC◇△–◎	20 points 24VDC digital input (6 points high speed 200KHz, 2 points medium speed 20KHz, 8 points medium speed total 5KHz); 12 points relay or transistor output (6 points high speed 200KHz, 2 points medium speed 20KHz); 1 RS232 or USB port (expandable up to 5); built-in RTC; detachable terminal block
		FBs-40MC◇△–◎	24 points 24VDC digital input (6 points high speed 200KHz, 2 points medium speed 20KHz, 8 points medium speed total 5KHz); 16 points relay or transistor output (6 points high speed 200KHz, 2 points medium speed 20KHz); 1 RS232 or USB port (expandable up to 5); built-in RTC; detachable terminal block
		FBs-60MC◇△–◎	36 points 24VDC digital input (8 points high speed 200KHz, 8 points medium speed total 5KHz); 24 points relay or transistor output (8 points high speed 200KHz); 1 RS232 or USB port (expandable up to 5); built-in RTC; detachable terminal block
	NC Positioning Main Units	FBs-20MN◇△–◎	2 sets (1 axis) 920KHz 5VDC digital differential input, 10 points 24VDC digital input (4 points high speed 200KHz, 6 points medium speed total 5KHz); 2 sets (1 axis) 920KHz 5VDC digital differential output, 6 points relay or transistor output (average high speed 200KHz); 1 RS232 or USB port (expandable up to 5); built-in RTC; detachable terminal block
		FBs-32MN◇△–◎	4 sets (2 axes) 920KHz 5VDC digital differential input, 16 points 24VDC digital input (4 points high speed 200KHz, 8 points medium speed total 5KHz); 4 sets (2 axes) 920KHz 5VDC digital differential output, 8 points relay or transistor output (4 points high speed 200KHz); 1 RS232 or USB port (expandable up to 5); built-in RTC; detachable terminal block
		FBs-44MN◇△–◎	8 sets (4 axes) 920KHz 5VDC digital differential input, 20 points 24VDC digital input (8 points medium speed total 5KHz); 8 sets (4 axes) 920KHz 5VDC digital differential output, 8 points relay or low speed transistor output; 1 RS232 or USB port (expandable up to 5); built-in RTC; detachable terminal block
Right Side Expansion Modules	Expansion Power Supply	FBs-EPW–AC/D24	Power supply of 100~240VAC or 24VDC input for expansion module; 3 sets output power with 5VDC, 24VDC, and 24VDC, 14W capacity
	DIO Expansion Units	FBs-24XY◇–◎	14 points 24VDC digital input, 10 points relay or transistor output, built-in power supply
		FBs-40XY◇–◎	24 points 24VDC digital input, 16 points relay or transistor output, built-in power supply
		FBs-60XY◇–◎	36 points 24VDC digital input, 24 points relay or transistor output, built-in power supply
	DIO Expansion Modules	FBs-8X	8 points 24 VDC digital input
		FBs-8Y◇	8 points relay or transistor output
		FBs-8XY◇	4 points 24VDC digital input, 4 points relay or transistor output
		FBs-16Y◇	16 points relay or transistor output
		FBs-16XY◇	8 points 24VDC digital input, 8 points relay or transistor output
		FBs-20X	20 points 24VDC digital input
		FBs-24XY◇	14 points 24VDC digital input, 10 points relay or transistor output
		FBs-40XY◇	24 points 24VDC digital input, 16 points relay or transistor output
		FBs-60XY◇	36 points 24VDD digital input, 24 points relay or transistor output
		FBs-24X	24 points high-density 24VDC digital input, 30 pins header with latch
		FBs-24YT/J	24 points high-density transistor SINK(T) or SOURCE(J) output (0.1A max.)，30 pins header with latch
	Thumbwheel switch module	FBs-32DGI	8 sets 4 digits (total 32 digits) thumbwheel switch (or 128 points independent switch) multiplex input module, 30 pins header connector
	16/7 Segment LED display modules	FBs-7SG1	1 set 8 digits 7-segment/4 digits 16-segment LED display (or 64 points independent LED) output display module, 16 pins header connector
		FBs-7SG2	2 sets 8 digits 7-segment/4 digits 16-segment LED display (or 128 points independent LED) output display module, 16 pins header connector

Module Name			Specifications
Left Side Expansion Modules	AIO modules	FBs-2DA	2 channels, 14-bit analog output module (-10~10V, 0~10V or -20~20mA, 0~20mA)
		FBs-4DA	4 channels, 14-bit analog output module (-10~10V, 0~10V or -20~20mA, 0~20mA)
		FBs-4A2D	4 channels, 14-bit analog input (same specification as 6AD)+2 channels, 14-bit analog output (same specification as 2DA) combo module
		FBs-6AD	6 channels, 14-bit analog input module (-10~10V, 0~10V or -20~20mA, 0~20mA)
	Temperature measurement modules	FBs-2TC	2 channels, thermocouple temperature input module with 0.1°C resolution.
		FBs-6TC	6 channels, thermocouple temperature input module with 0.1°C resolution.
		FBs-16TC	16 channels, thermocouple temperature input module with 0.1°C resolution.
		FBs-6RTD	6 channels, RTD temperature input module with 0.1°C resolution.
		FBs-16RTD	16 channels, RTD temperature input module with 0.1°C resolution.
		FBs-6NTC	6 channels, NTC temperature input module with 0.1°C resolution.
	AI + Temperature Measurement combo modules	FBs-2A4TC	2 channels, 14-bit analog input (same specifications as 6AD)+ 4 channels thermocouple temperature input (same specifications as 6TC) combo module
		FBs-2A4RTD	2 channels, 14-bit analog input (same specifications as 6AD) + 4 channels RTD temperature input (same specifications as 6RTD) combo module
	Voice modules	FBs-VOM	Built-in 1MB memory (play continuously up to 2 minutes), extendable 4GB SD card(play continuously up to 8,000 minutes) voice module, 245 messages, output 2W
	Load Cell Module	FBs-1LC	1 channel, load cell measurement module with 16-bit resolution (including sign bit)
		FBs-2LC	2 channels, load cell measurement module with 16-bit resolution (including sign bit)
	Potential Meter Module	FBs-4PT	4 channels, 14-bit potential meter input module (Impedance range: 1~10K Ω)
	Communication modules	FBs-CM22	2 ports RS232 (Port3 +Port 4) communication module
		FBs-CM55	2 ports RS485 (Port3 +Port 4) communication module
		FBs-CM25	1 port RS232 (Port3) + 1 port RS485 (port 4) communication module
		FBs-CM25E	1 port RS232 (Port3) + 1 port RS485 (port 4) + Ethernet network interface communication module
		FBs-CM55E	1 port RS485 (Port3) + 1 port RS485 (port 4) + Ethernet network interface communication module
		FBs-CMZB	ZigBee communication module
		FBs-CMZBR	ZigBee communication repeater
		FBs-CMGSM	GSM wireless communication module
		FBs-CM25C	General purpose RS232 to RS485/RS422 communication interface converter with photocouple isolation
		FBs-CM5R	General purpose RS485 repeater with photocouple isolation
		FBs-CM5H	General purpose 4 ports RS485 HUB with photocouple isolation, RS485 can be connected as star connection
	Communication boards	FBs-CB2	1 port RS232 (Port 2) communication board
		FBs-CB22	2 ports RS232 (Port 1+ Port 2) communication board
		FBs-CB5	1 port RS485 (Port 2) communication board
		FBs-CB55	2 ports RS485 (Port 1+ Port 2) communication board
		FBs-CB25	1 port RS232 (Port 1) + 1 port RS485 (Port 2) communication board
		FBs-CBE	1 port 10 Base T Ethernet communication board
		FBs-CBEH	1 port 100 Base T Ethernet communication board
		FBs-CBCAN	1 port CANopen communication board
	AIO boards	FBs-B2DA	2 channels, 12-bit analog output board (0~10V or 0~20mA)
		FBs-B2A1D	2 channels, 12-bit analog input + 1 channel, 12-bit analog output combo analog board (0~10V or 0~20mA)
		FBs-B4AD	4 channels, 12-bit analog input board (0~10V or 0~20mA)
	Precision Load Cell Module	FBs-1HLC	1 channel, high precision weighing control module with 24-bit resolution
	3-Axis Motion Control Module	FBs-30GM	3-Axis with linear and circular interpolation advanced motional control module, 3 sets of 200KHz high speed pulse input, 3 sets of 500KHz high speed pulse output, 14 points main unit, 16M Bytes program capacity, 20K Words retentive file register, built-in RS485 and Ethernet, 7.62mm detachable terminal block
	Simple HMI	FBs-BDAP	Board type Data Access Panel
		FBs-BPEP	Board type Parameter Entry Panel
		FBs-PEP	Multi characters with graphics-based Parameter Entry Pane
		FBs-DAP-B/BR	16 X 2 LCD character display, 20 keys keyboard, 24VDC power supply, RS485 communication interface, built-in RFID Read/Write module with BR
		FBs-DAP-C/CR	16 X 2 LCD character display, 20 keys keyboard, 5VDC power supply, RS232 communication interface, built-in RFID Read/Write module with CR
Peripheral and Accessory	RFID Card	CARD-H	Read / Write wireless card (for FBs-DAP-BR/CR and FBs-PEPR)
	Programming Devices	FP-08	FBs- Series PLC handheld programmer
		Winproladder	FATEK-PLC Winproladder Programming software
	Memory Pack	FBs-PACK	FBs-PLC program memory pack with 20K Words program, 20K Words register, write protection switch
	PWMDA module	PWMDA	10-bit single channel pulse width modulation(PWM) 0~10V analog output (AO) module
	USB- RS232 Converter Cable	FBs-U2C-MD-180	Communication converter cable with standard USB AM connector to RS232 MD4M connector (used in standard PC USB to FBs main unit Port 0 RS232), length 180cm
	Communication cables	FBs-232P0-9F-150	Mini-DIN 4M to DB9F communication cable (FBs main unit Port 0 RS232 connect to standard DB9M), length 150cm

Module Name		Specifications
	FBs-232P0-9M-400	Mini-DIN 4M to DB9M communication cable (FBs main unit Port 0 RS232 connect to DB9F), length
	FBs-232P0-MD-200	Mini-DIN 4M to Mini-DIN 4M communication cable (FBs main unit Port 0 RS232 connect to FBs-PEP/PEPR), length 200cm
	FBs-232P0-MDR-200	Mini-DIN 4M to 90° Mini-DIN 4M communication cable (FBs main unit Port 0 RS232 connect to FBs-PEP/PEPR), length 200cm
High density DIO cable	HD30-22AWG-200	High density modules(FBs-24X, FBs-24YT/J, FBs-32DGI) connector，30pin Socket, 22AWG I/O cable, length200cm
16/7-Segment LED display	DBAN.8-nR	0.8" 4-digit 16-segment LED display, n means R(Red) 16-segment LED characters display installed, can be 1~4
	DBAN.2.3-nR	2.3" 4-digit 16-segment LED display, n means R(Red) 16-segment LED characters display installed, can be 1~4
	DB.56-nR	0.56" 8-digit 7-segment display, n means R(Red) 7-segment LED characters display installed, can be 1~8
	DB.8-nR	0.8" 8-digit 7-segment display, n means R(Red) 7-segment LED characters display installed, can be 1~8
	DB2.3-nR	2.3" 8-digit 7-segment display, n means R(Red) 7-segment LED characters display installed, can be 1~8
	DB4.0-nR	4.0" 4-digit 7-segment display, n means R(Red) 7-segment LED characters display installed, can be 1~4
Training Box	FBs-TBOX	46cm x 32 cm x 16cm suitcase, containing FBs-24MCT main unit. FBs-CM25E communication module (RS232 + RS485 + Ethernet network), 14 simulated input switches, 10 external relay output, Doctor terminal outlet I/O, peripherals such as stepping motor, encoder, 7-segment display, 10 of 10mm LED indicator, thumbwheel switch, and 16 key keyboard.

1. ◇：R — Relay output；T — Transistor SINK(NPN) output； J — Transistor SOURCE (PNP) output

2. o：2 — built-in RS232 port；U — built-in USB port (non-standard)

3. ◎：AC — 100~240VAC power supply； D12 — 12VDC power supply；D24 — 24VDC power supply

4. ‑C：Blank — Standard；‑C —**t**add in RTC

5. The unmarked frequencies of Digital Input (DI) or Digital Output (DO) are low speed.