

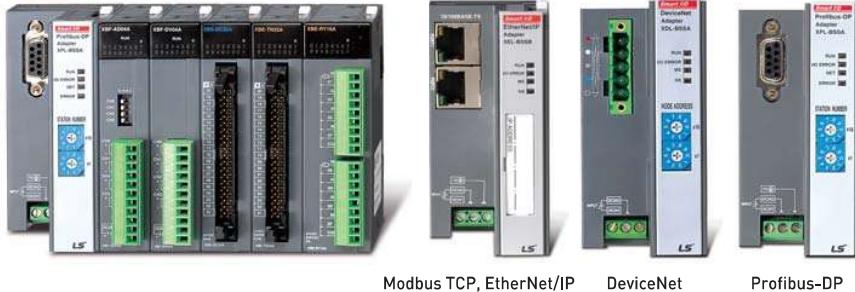
# SMART I/O

## Expandable Type



### Features

- Easy configuration of remote system using XGB expansion I/O
- Up to 8 modules expandable with Network adapter
- Max. 256 point digital I/O
- Max. 16 channel analog I/O
- Network adapter: Profibus-DP, DeviceNet, Rnet, Modbus TCP, EtherNet/IP



Modbus TCP, EtherNet/IP   DeviceNet   Profibus-DP

### Available Module

In/Out	Part Number	XDL-BSSA	XPL-BSSA	XEL-BSSA	XEL-BSSB	XRL-BSSA
DC Input	XBE-DC08A	○	○	○	○	○
	XBE-DC16A(B)	○	○	○	○	○
	XBE-DC32A	○	○	○	○	○
Relay Output	XBE-RY08A(B)	○	○	○	○	○
	XBE-RY16A	○	○	○	○	○
TR Output	XBE-TN(TP)08A	○	○	○	○	○
	XBE-TN(TP)16A	○	○	○	○	○
	XBE-TN(TP)32A	○	○	○	○	○
Mixed	XBE-DR16A	○	○	○	○	○
A/D (V/I)	XBF-AD04A	○	○	○	○	○
	XBF-AD08A	×	○	○	○	○
	XBF-AD04C	×	○	○	○	○
D/A (I)	XBF-DC04A	○	○	○	○	○
	XBF-DC04C	×	○	○	○	○
D/A (V)	XBF-DV04A	○	○	○	○	○
	XBF-DV04C	×	○	○	○	○
Mixed	XBF-AH04A	○	○	○	○	○
RTD	XBF-RD04A	○	○	○	○	○
TC	XBF-TC04S	○	○	○	○	○
Position	XBF-PD02A	×	×	×	×	×

### Modbus TCP, EtherNet/IP Specification

Item	Specification
Communication Speed	10/100Mbps
Transmission Path Method	Base Band
Standard Functions	IEEE 802.3
Flow Control	HALF/FULL
Modulation Type	NRZI
Max. Distance Between Nodes	100m
Max. Protocol Size	Data 1500byte
Communication Zone Access Method	CSMA/CD
Check Method for Frame Error	CRC32
Connector Connection	RJ-45(2port)
IP Setting	S/W Setting
Topology	Bus, Star
Protocol	MODBUS/TCP, EtherNet/IP
Max. Digital I/O Point	512 (input 256, output 256)
Max. Digital I/O Connection Number	8
Max. Analog I/O Connection Number	8
Expansion Analog Module Occupation Number	8byte
Power	Rated Input Voltage/Current
	DC 24V/0.7A
	Power Range
	DC 19.2V ~ 28.8V
Output Voltage/Current	5V(±20%) / 1.5A
	Insulation
	Non-insulation
Weight(g)	100

### DeviceNet Specification

Item	Specification		
Communication Interface		Poll, Bit-strobe, COS/Cyclic	
Master/Slave		Group 2 only slave	
Max. Station		Auto baud rate	
Max. No. of Extension I/O Equipment		Slave	
Max. Digital I/O Point		64 [including master]	
Max. No. of Analog I/O Channel		8	
Communication Speed & Distance		512 point [input max 256 point/output max 256 point]	
Input Power		Input 16 channels [output 16 channels]	
Communication Speed & Distance	Speed	125kbps	250kbps
	Distance	500m	250m
Input Power	Rated Input Voltage	500m	
	Power Range	DC 24V	
	Output Voltage/Current	19.2V ~ 28.8V [available to operate in 11V]	
	Insulation	5V(±20%) / 1.5A	
Basic Specification	Weight (g)	Non-insulation	

### Profibus-DP Specification

Item	Specification			
Standard	EN50170 / DIN 19245			
Interface	RS-485			
Medium Access	Polling			
Topology	Bus			
Encoding Method	NRZ			
Communication Interface	Sink mode, Freeze mode			
Master/Slave		Auto baud rate		
Cable		slave		
		Shielded Twisted Pair		
Communication Speed and Distance	Speed (Kbps)	9.6	19.2	93.75
	Distance (m)	1200	1200	1200
	Speed (Kbps)	1500	3000	6000
	Distance (m)	200	100	100
Max. Node	100 station (setting range: 0 ~ 99 )			
Max. Modular Type I/O Equipment No.	8			
Max. Digital I/O Point	512 point [input Max. 256 point/output max. 256 point]			
Max. Analog I/O Channel No.	32 channels [input Max. 16 channels/output Max. 16 channels] [analog module occupy digital 64 point]			
Input Power	Rated Input Voltage/Current	DC 24V/ 0.55A		
	Power Range	DC19.2 ~ 28.8V		
	Output Voltage/Current	5V(±20%) / 1.5A		
	Insulation	Non-insulation, communication part insulation		
Weight (g)	100			