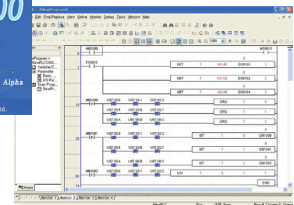




XGK/ XGI Series | High performance PLC



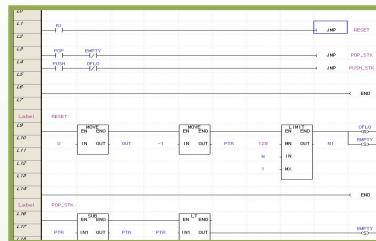
XGK series

- Fastest CPU processing of 28ns/step
- Up to 6,144 I/O points configurable (32,768 points controllable with remote I/O)
- Integrated intelligent Software package: XG5000, XG-PD, XG-PM
- System solution based on open network: Ethernet, Profibus-DP, DeviceNet
- Special devices for easy programming
- Massive device memory
- USB I/F for prog. up/download & monitoring

XGI series

- Fastest CPU processing of 28ns/step
- Up to 6,144 I/O points configurable (131,072 points controllable with remote I/O)
- IEC 61131-3 Standard programming
 - LD (Ladder Diagram), SFC (Sequential Function Chart), ST (Structured Text)
 - User defined FB (Function Block)
- Built-in PID function (Max. 256 loop)
- USB I/F for prog. up/download & monitoring

LD

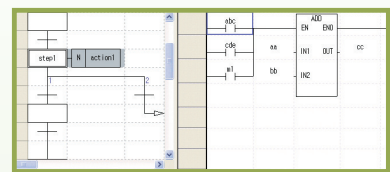


ST

```

10 0.02 := 1 - SQRT(1 - 0.04)
20 END_IF;
21
22
23 // CASE
24 TV := MONO_DEC_TO_INT(THROUWHEEL);
25 TV_ERROR := 0;
26 CASE TV OF
27   1, 2: DISPLAY := WHEN_TEMP;
28   3: DISPLAY := MOTOR_SPEED;
29   4: DISPLAY := GROSS - 1000;
30   5, 6: 100: DISPLAY := ADD(TV, 1);
31   7: DISPLAY := 0;
32   TV_ERROR := 1;
33 END_CASE;
34 SWITCHON := INT_TO_REAL(MONO(DISPLAY));
35
36 // FOR
37 FOR J := 1 TO 3 DO
38   FOR I := 1 TO 2 DO
39     IF FLAG THEN EXIT; END_IF;
40     SUM := SUM + J;
41   END_FOR;
42   SUM := SUM * I;
43   FLAG := 1;
44 END_FOR;
  
```

SFC



CPU modules

XGK-CPUU (XGI-CPUU)

- 128Ksteps(1Mbytes) program memory
- 28ns processing speed
- 6,144 I/O points control

XGK-CPUH (XGI-CPUH)

- 64Ksteps(512Kbytes) program memory
- 28ns processing speed
- 6,144 I/O points control

XGK-CPUA

- 32Ksteps program memory
- 28ns processing speed
- 3,072 I/O points control

XGK-CPUS (XGI-CPUS)

- 32Ksteps(128Kbytes) program memory
- 84ns processing speed
- 3,072 I/O points control

XGK-CPUE

- 16Ksteps program memory
- 84ns processing speed
- 1,536 I/O points control

Expansion modules

Power modules

With AC Free voltage, 220V and DC 24 V power supply

Base modules

With 4/6/8/12 main and expansion base

Digital input/output modules

From 8 to 64 of transistor, relay and triac switches

Analog input/output modules

With 4 or 8 CH current/voltage signals

Temperature input modules

With 4 CH Pt100/JPt100 resistance thermometer and thermocouple

High speed counter module

For connection with incremental encoder (2 channels of Open collector or Line driver type)

Positioning module

1~4 axis positioning for servo, step drive and motor

Network modules

FEnet modules

Ethernet network with TCP/IP protocol

Pnet modules

Profibus-DP fieldbus protocol for connection between LS PLC and different manufacturers

Dnet modules

DeviceNet fieldbus protocol for connection between LS PLC and different manufacturers

Rnet modules

Dedicated network for remote I/O control (LS Smart I/O)

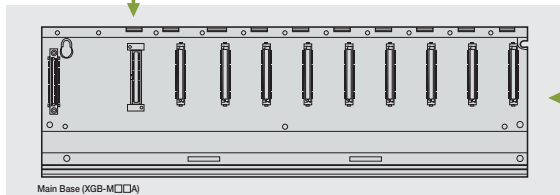
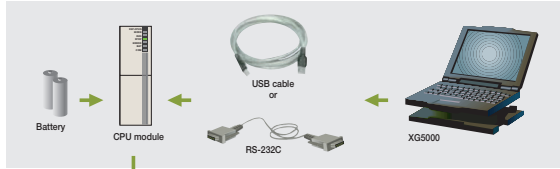
Cnet modules

Serial communication module with RS-232C/422/485

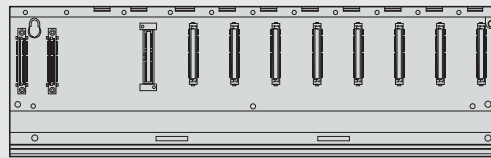
RAPIEnet module

Dedicated network based on Ethernet

XGK/XGI Series | Product list

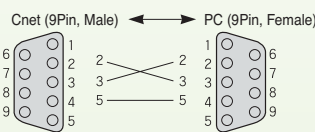


Item	Type	Description
Expansion cable	XGC-E041	Expansion cable 0.4m
	XGC-E061	Expansion cable 0.6m
	XGC-E121	Expansion cable 1.2m
	XGC-E301	Expansion cable 3.0m
	XGC-E501	Expansion cable 5.0m
	XGC-E102	Expansion cable 10m
	XGC-E152	Expansion cable 15m
Expansion terminator	XGT-TERA	Expansion terminator



Item	Main base	Expansion base
4 Slot	XGB-M04A	XGB-E04A
6 Slot	XGB-M06A	XGB-E06A
8 Slot	XGB-M08A	XGB-E08A
12 Slot	XGB-M12A	XGB-E12A

• XG5000 Cable (RS-232C)



Item	CPU module	I/O point
	Type	Description
XGK	XGK-CPUU, CPUH	6,144
	XGK-CPUA, CPUS	3,072
	XGK-CPUE	1,536
XGI	XGI-CPUU/D, CPUU, CPU	6,144
	HXGI-CPUS	3,072
	XGI-CPUE	1,536

CPU Connecting Cable	
USB 301A	USB downloading cable
K1C-050A	RS-232C downloading cable

Item	Type	Description
USB cable	USB-301A	USB downloading cable
RS-232C cable	K1C-050A	RS-232C downloading cable

Item	Input module		
	AC110V	AC220V	DC24V
8 points	-	XGI-A21A	XGI-D21A
16 points	XGI-A12A	-	XGI-D22A
	-	-	XGI-D22B
32 points	-	-	XGI-D24A
	-	-	XGI-D24B
64 points	-	-	XGI-D28A
	-	-	XGI-D28B



Power module			
AC	Free Voltage	XGP-ACF1	DC5V 3A
	220V	XGP-ACF2	DC24V 0.6A
DC		XGP-AC23	DC5V 6A
		XGP-DC42	DC5V 8.5A

Item	Output module		
	Relay	Triac	Transistor
8 points	XGQ-RY1A	-	-
16 points	XGQ-RY2A	XGQ-SS2A	XGQ-TR2A
	XGQ-RY2B	-	XGQ-TR2B
32 points	-	-	XGQ-TR4A
	-	-	XGQ-TR4B
64 points	-	-	XGQ-TR8A
	-	-	XGQ-TR8B

Item	Output module	
	16-point DC input	16-point TR output

Special module	
Analog input	XGF-AV8A Voltage input type, 8Ch
	XGF-AC8A Current input type, 8Ch
	XGF-AD8A Voltage/ Current input, 8Ch
	XGF-AD4S Voltage/ Current input, 4Ch (Isolated)
Analog output	XGF-AD16A Voltage/ Current input, 16Ch
	XGF-AW4S 2-wire, Voltage/ Current input, 4Ch (Isolated)
	XGF-DV4A Voltage output type, 4Ch
	XGF-DC4A Current output type, 4Ch
Analog Input/Output	XGF-DV8A Voltage output type, 8Ch
	XGF-DC8A Current output type, 8Ch
	XGF-DV4S Voltage output, 4Ch (Isolated)
	XGF-DC4S Current output, 4Ch (Isolated)
High-speed counter	XGF-AH6A Input: 4ch, Voltage/ Current Output: 2ch Voltage/ Current
	XGF-HO2A Pulse (OC) input type, 2Ch
	XGF-HD2A Pulse (LD) input type, 2Ch
	XGF-PD1A-PD3A Open collector, 1-3axis
Positioning	XGF-PD1A-PD3A Line drive, 1-3axis
	XGF-PD1H-PD4H Open collector, 1-4axis
	XGF-PD1H-PD4H Line drive, 1-4axis
	XGF-PN8A LS Standard EtherCAT Net, 8axis
Positioning (Network Type)	XGF-PN8B Standard EtherCAT Net, 8axis
	XGF-TC4S Thermocouple input, 4Ch
	XGF-RD4A RTD input, 4Ch
	XGF-RD4S RTD input, 4Ch (Isolated)
Temperature control	XGF-TC4UD Input: 4ch, Voltage/ Current, RTD/TC Output: 8ch, (TR/Current) Controller: 4 loops
	XGF-TC4RT Input: 4ch, (RTD) Output: 4ch, (TR) Controller: 4 loops
	XGF-SOEa DC24V, 32points
	XGF-SOEa

Communication module	
RAPIEnet	XGL-EIMT RAPIEnet Twisted fair 2Ch
	XGL-EIMH RAPIEnet Fiber optic Twisted fair 1Ch
	XGL-EIMF RAPIEnet Fiber optic 2Ch
	XGL-EIMT RAPIEnet Twisted fair 2Ch For PC
Cnet	XGL-EIMF RAPIEnet Fiber optic 2Ch For PC
	XGL-CH2A RS-232C/RS-422
	XGL-C22A RS-232C, 2Ch
	XGL-C42A RS-422, 2Ch
Ethernet (Open)	XGL-EFMF Fiber optic, Master, SC type
	XGL-EFMT Twisted pair, Master, RJ-45
	XGL-ESHF Fast Ethernet, Industrial Ring module
	XGL-EHST Fast Ethernet, Switching hub
Ethernet (Dedicated)	XGL-EDMF Fiber optic, Master, SC type
	XGL-EDMT Twisted pair, Master, RJ-45
	XGL-EIPT Industrial Ethernet, 2ports
	XGL-EIPT Industrial Ethernet, 2ports
EtherNet/IP	XGL-FMEA Pnet, Master, TP
	XGL-DMEA DeviceNet, Master
DeviceNet	XGL-PMEA
	XGL-PMEC Profibus-DP, Master
	XGL-PSRA Profibus-DP, Slave, Remote Inter face
	XGL-PSEA Profibus-DP, Slave
Fnet	XGL-FMEA Dedicated network