

XGB

Programmable Logic Controllers



Key XBM/XEC/XBC Features

- Max. 5-channel communication with integral functions & expansion modules
- Enhanced user interface with XG5000
- Various monitoring functions
- Network diagnosis & monitoring
- Communication ports: RS232 & RS485
- Network configuration via Ethernet & Cnet I/F



IMO's XGB range of programmable logic controllers represents a considerable leap forward in next generation PLC technology. The compact design, increased functionality, high speed processing and improved performance delivers maximum automation at minimum cost. The flexibility of the XGB means that it can be integrated into any solution with ease, from simple control to complex applications with the choice of two footprint styles depending on space. Utilising expansion cards, which are compatible with either style, the I/O can reach a maximum of 384 points, 5 communication ports and a scan speed of 83ns/step.

The enhanced user interface of the powerful new XG5000 programming software allows easy network diagnosis plus a variety of monitoring functions.

XBM Programmable Logic Controllers

Key Features XBM

- 160ns/Step processing speed and floating-point arithmetic with on-board CPU
- Max. 7 expansion modules, max. 256 I/O point control: PLC Systems for small and medium-scale applications
- Ladder programming

XBM PLC Specification

Supply Voltage	24VDC
Relay Output Rating	2A Resistive
Transistor Output Rating	0.2A / point
Program Capacity	10k steps
Max. I/O Points	240/256*1
Analogue Input Resolution*2	14 bit
Analogue Output Resolution*2	14 bit
PID Control	Yes
Programming Languages	Ladder
High Speed Inputs	Yes
Positioning	Yes

*1 Model dependant

*2 When using Analogue Expansion Units



XBM PLC Product Selection

	DI	RO (2A)	DO (0.2A)
XBM-DR16S	8	8	-
XBM-DN32S*3	16	-	16

*3 Please contact IMO in order to correctly specify the required breakout cable and terminal boards

XBC Programmable Logic Controllers

Key Features XBC

- 83ns/Step processing speed and floating-point arithmetic with on-board CPU
- Max. 10 expansion modules, max. 384 I/O point control: PLC systems for small and medium-scale applications
- Ladder programming

XBC PLC Specification

Supply Voltage	24VDC or 100-240VAC
Relay Output Rating	2A Resistive
Transistor Output Rating	0.5A / point
Program Capacity	15k steps
Max. I/O Points	352/384*1
Analogue Input Resolution*2	14 bit
Analogue Output Resolution*2	14 bit
PID Control	Yes
Programming Languages	Ladder
High Speed Inputs	Yes
Positioning	Yes

*1 Model dependant

*2 When using Analogue Expansion Units



XBC PLC Product Selection

	DI	RO (2A)	DO*3(0.2A)
XBC-DR32H	16	16	-
XBC-DR64H	32	32	-
XBC-DR32H/DC	16	16	-
XBC-DR64H/DC	32	32	-

*3 Please contact IMO to order transistor output versions

XEC Programmable Logic Controllers

Key Features XEC

- 83ns/Step processing speed and floating-point arithmetic with on-board CPU
- Max. 10 expansion modules, max. 384 I/O point control: PLC systems for small and medium-scale applications
- Ladder, structured text & SFC programming

XEC PLC Specification

Supply Voltage	10-24VDC or 100-240VAC
Relay Output Rating	2A Resistive
Transistor Output Rating	0.5A / point
Program Capacity	15k steps
Max. I/O Points	352/384*1
Analogue Input Resolution*2	14 bit
Analogue Output Resolution*2	14 bit
PID Control	Yes
Programming Languages	IEC 61131
High Speed Inputs	Yes
Positioning	Yes

*1 Model dependant

*2 When using Analogue Expansion Units



XEC PLC Product Selection

	DI	RO (2A)	DO*3(0.2A)
XEC-DR32H	16	16	-
XEC-DR32H/DC-E*4	16	16	-
XEC-DR64H	32	32	-
XEC-DR64H/DC-E*4	32	32	-

*3 Please contact IMO to order transistor output versions

*4 E-marked versions for 12V vehicle applications

XGB continued

XGB U Programmable Logic Controllers



Key Features XGB U

- Dual port Ethernet
- 1 channel RS232 port
- 1 channel RS485 port
- Integral web server & FTP
- Data logging function
- Integral USB port
- 8 channel high speed counter
- Integral email & SNTIP
- Versions available with integral analogue or positioning options



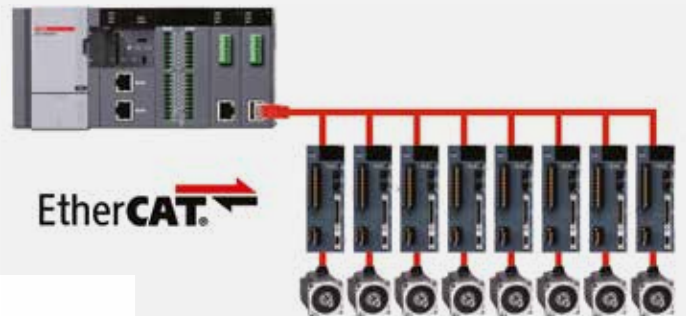
With so many included innovations, the XGB U sets new standards in ultimate PLC performance. Compatible with the existing expansion modules of the XGB range, and with a host of outstanding features, the XGB U will provide the utmost efficiency for your applications. The integral web server offers monitoring of PLC information and data through a web browser that includes basic PLC information, module information, diagnostics and flag monitoring, data log file download capability, O/S updating, ladder program updates and more.

With increased CPU processing speeds and increased program capacity, the XGB U is the future of programmable logic controllers.

EtherCAT Positioning Module (XBF-PN08B)

Offers high speed backplane transmission through USB host function, and standard EtherCAT protocol, CoE (CANopen over EtherCAT) with 1ms communication cycle.

Other features include Max. 8 axes servo driver control, 2-8 axes linear interpolation, 2 axes circular interpolation, 3 axes helical interpolation and 8 types of CAM data to control CAM.



XGB U PLC Specification

	XBC-U	XEC-U
Supply Voltage	230VAC/24VDC	230VAC/24VDC
Relay Output Rating	2A Resistive	2A Resistive
Transistor Output Rating	0.5A / point, 2A / COM	0.5A / point, 2A / COM
Program Capacity	32k steps	384kbytes
Max. I/O Points	348/352*1	348/352*1
Analogue Input Resolution*2	1/16000*2	1/16000*2
Analogue Output Resolution*2	1/16000*2	1/16000*2
PID Control	Yes	Yes
Programming Languages	Ladder	IEC 61131
High Speed Inputs	8	8
Positioning	Yes	Yes

*1 Model dependant

*2 Applies to models with analogue Input/Output only

XGB U PLC Product Selection

	DI	RO (2A)	DO (0.2A)
XBC-DN(P)32U*3	16	-	16
XBC-DR28U	16	12	-
XBC-DN(P)32UA*3	16	-	16
XBC-DR28UA	16	12	-
XBC-DN(P)32UP*3	16	-	16
XBC-DR28UP	16	12	-
XEC-DR28U	16	12	-

*3 N = NPN version P = PNP version

U = Standard UA = With Analogue UP = With Positioning

For 24VDC models please add suffix "/DC" to the part number

Expansion Units & Accessories

Common for all XGB PLC controllers

	DI	Relay Out	DO	AI	AO	RTD	TC
XBE-DC16B	16	-	-	-	-	-	-
XBE-DC32A*1	32	-	-	-	-	-	-
XBE-RY16A	-	16	-	-	-	-	-
XBE-TN16A	-	-	16	-	-	-	-
XBE-TN32A*1	-	-	32	-	-	-	-
XBE-TP16A	-	-	16	-	-	-	-
XBE-TP32A*1	-	-	32	-	-	-	-
XBE-DR16A	8	8	-	-	-	-	-
XBF-AD04A	-	-	-	4	-	-	-
XBF-AD08A	-	-	-	8	-	-	-
XBF-AH04A	-	-	-	2	2	-	-
XBF-DV04A	-	-	-	-	4	-	-
XBF-DC04A	-	-	-	-	4	-	-
XBF-RD04A	-	-	-	-	-	4	-
XBF-TC04S	-	-	-	-	-	-	4
XBF-AD04C	4 Channel Analogue Input Volt / Current 16 Bit						
XBF-LD02S	2 Channel Load Cell Input Module						
XBL-EMTA	Ethernet Communications Module						
XEL-BSSA	Modbus TCP I/O Adapter						
XBF-PD02A	XGBU Positioning Module, 2 Axis, Line Driver Type						
XBF-PN08B	XGBU Network Positioning Module, 8 Axis, EtherCAT						

PMC-310S	Serial Programming Cable
USB-301A	USB Programming Cable
XBC-XECBATTERY	Replacement Battery
XB0-M1024A	Program EEPROM
R40H/20HH-05S-XBM3	0.5m Cable link to breakout unit TG7-1H40S (XBM)
C40HH-05SB-XBI	0.5m Cable link to breakout unit TG7-1H40S (XBE)
C40HH-10SB-XBI	1m Cable link to breakout unit TG7-1H40S (XBE)
TG7-1H40S	Screw I/O Termination (XBM & XBE)



▲
C40HH-10SB-XBI
Cable link to breakout unit



▲
TG7-1H40S
Screw I/O Termination



▲
XEL-BSSA
Modbus TCP I/O System

*1 Please contact IMO in order to correctly specify the required breakout cable and terminal boards



XG5000 Programming Software

IMO provides license free programming software for all XGB PLCs. Simply go to www.imopc.com and click on "Software" to find the range of products you need software for, and then download as required.



▲
XBF-AH04A
Expansion Module



▲
XBE-RY16A
Expansion Module