

## Specifications: I-8437 / 8837

<b>Power supply</b>	
Power requirements	10 to 30VDC (unregulated)
Power consumption	20W (when I/O slots are empty )
Protection	Built-in power protection & network protection circuit
<b>General environment</b>	
Operating temperature	-25°C to +75°C
Storage temperature	-30°C to +85°C
Humidity	0 to 95 % (non-condensed)
<b>System</b>	
CPU	Am188™ES,40MHz, or compatible
Watchdog timer	0.8 second
Real time clock	Year-2000 compliance. Gives hour, minute, sec, date of week, date of month, month & year (1980 to 2079)
SRAM	512Kbytes
FLASH Memory	512Kbytes, Erase unit is 64K bytes, 100,000 erase/write cycles
NVSRAM	31 bytes, battery backup, data valid up to 10 years
EEPROM	2048 bytes, retention > 100 years. 1,000,000 erase/write cycles
SMMI	Five 7-Seg. Led, four push buttons & three Led on the front panel. It can display message, value, input value, simulate input & output.
I/O slots	4 empty slots for I-8437, 8 empty slots for I-8837 Accept parallel & serial I/O boards
NET ID	8 dip switch to set NET ID as 1 to 255
<b>Serial ports</b>	
COM1	RS232: TXD,RXD,GND, Speed: 115200 bps max. Program download port.
Ethernet	10M bps, NE2000 compatible, 10 BaseT, Program download port.
COM3	Can be configed as RS232 or S485, Speed: 115200 bps max. RS232: TXD,RXD,RTS,CTS,GND, RS485: Data+, Data-
COM4	RS232: Full modem signals, Speed: 115200 bps max. TXD,RXD,RTS,CTS,DSR,DTR,CD,RI,GND.
<b>Development software</b>	
ISaGRAF	IEC61131-3 standard. Languages: LD, ST, FBD, SFC, IL & FC
<b>Motion control</b>	
	The I-8417/8817/8437/8837 can integrate with one I-8091(2-axes) or two I-8091(4-axes) motion board to do motion control. When doing motion control, Ethernet communication is not available.
<b>PWM output</b>	
Pulse Width Modulation output	8 channels max. for one controller. 500Hz max. for Off=1ms & On=1 ms Output square curve: Off: 1 to 32767 ms, On: 1 to 32767 ms Optional parallel D/O boards: i-8037, 8041, 8042, 8054, 8055,

	8056, 8057, 8060, 8063, 8064, 8065, 8066,8068, 8069
<b>Counters</b>	
Parallel D/I counter	8 ch. max. for one controller. Counter value: 32 bit 500Hz max. Min. pulse width > 1ms Optional parallel D/I boards: i-8040, 8042, 8051, 8052, 8053, 8054, 8055, 8058, 8063, 8077
Serial D/I counter	Counter input: 100Hz max. Counter value: 0 to 65535 (16 bit) Optional serial I-87K D/I boards: i-87051, 87052, 87053, 87054, 87055, 87058, 87063
Remote D/I counter	All remote I-7000 & I-87K D/I modules support counters. 100Hz max. Counter value: 0 to 65535 (16 bit)
High speed counter	i-87082: 100kHz max. 32 bit, i-8080: 450kHz max. 32 bit
<b>Protocols</b>	
Modbus serial protocol	COM1 default for connecting ISaGRAF, PC/HMI & MMI panels.
Modbus TCP/IP protocol	Ethernet port for connecting ISaGRAF & PC/HMI.
Remote I/O	COM3 or COM4 supports I-7000 I/O modules & (I-87K base + I-87K serial I/O boards) as remote I/O. Max. 64 I/O module for one controller
Modbus slave I/O devices	COM1 or COM3 or COM4 ( or COM5 if multi-serial port boards are plugged) supports Modbus master protocol to connect to other Modbus slave I/O devices
Fbus	A software mechanism built in COM3 port to exchange data between ICP DAS's ISaGRAF controllers.
Ebus	A software mechanism built in Ethernet port to exchange data between ICP DAS's ISaGRAF Ethernet controllers.
SMS: Short Message Service	COM4 or COM5 can link to a GSM modem to support SMS. User can request data or control the controller by cellular phone. The controller can also send data & alarms to user's cell. phone. Optional GSM modems: GM29:GSM 900/1800 MHz
User defined protocol	User can write his own protocol applied at COM1, COM3, COM4 (& COM5 to COM20 if multi-serial port boards are plugged).
Modem_Link	Supports PC remotely download & monitor & I-8417/8817/8437/8837 through a normal modem.
MMICON / LCD	COM3 or COM4 supports ICP DAS's MMICON. The MMICON is featured with a 240 x 64 dot LCD and a 4 x 4 Keyboard. It can display picture, string, integer, float, and input a character, string, integer and float.
Redundant Bus7000	Two ISaGRAF controllers can link to remote I-7000 & I-87K I/O modules at the same time. Only one controller is active to control these remote I/Os. If one is dead, the other one will take over the control of remote I/Os.
<b>Battery backup SRAM</b>	
	Data, date & time can be stored at S256/S512, and then PC can load these data via COM1 or COM2. PC can also download pre-defined data to the S256/S512. Optional: S256: 256kbytes, S512: 512kbytes

## Specifications: I-8417 / 8817

Power supply	
Power requirements	10 to 30VDC (unregulated)
Power consumption	20W (when I/O slots are empty )
Protection	Built-in power protection & network protection circuit
General environment	
Operating temperature	-25°C to +75°C
Storage temperature	-30°C to +85°C
Humidity	0 to 95 % (non-condensed)
System	
CPU	Am188™ES,40MHz, or compatible
Watchdog timer	0.8 second
Real time clock	Year-2000 compliance. Gives hour, minute, sec, date of week, date of month, month & year (1980 to 2079)
SRAM	512Kbytes
FLASH Memory	512Kbytes, Erase unit is 64K bytes, 100,000 erase/write cycles
NVSRAM	31 bytes, battery backup, data valid up to 10 years
EEPROM	2048 bytes, retention > 100 years. 1,000,000 erase/write cycles
SMMI	Five 7-Seg. Led, four push buttons & three Led on the front panel. It can display message, value, input value, simulate input & output.
I/O slots	4 empty slots for I-8417, 8 empty slots for I-8817 Accept parallel & serial I/O boards
NET ID	8 dip switch to set NET ID as 1 to 255
Serial ports	
COM1	RS232: TXD,RXD,GND, Speed: 115200 bps max. Program download port.
COM2	RS485: Data+, Data-, Speed: 115200 bps max. Self-tuner ASIC inside, Program download port.
COM3	Can be configed as RS232 or S485, Speed: 115200 bps max. RS232: TXD,RXD,RTS,CTS,GND, RS485: Data+, Data-
COM4	RS232: Full modem signals, Speed: 115200 bps max. TXD,RXD,RTS,CTS,DSR,DTR,CD,RI,GND.
Development software	
ISaGRAF	IEC61131-3 standard. Languages: LD, ST, FBD, SFC, IL & FC
Motion control	
	The I-8417/8817/8437/8837 can integrate with one I-8091(2-axes) or two I-8091(4-axes) motion board to do motion control. When doing motion control, Ethernet communication is not available.
PWM output	
Pulse Width Modulation output	8 channels max. for one controller. 500Hz max. for Off=1 & On=1 ms Output square curve: Off: 1 to 32767 ms, On: 1 to 32767 ms Optional parallel D/O boards: i-8037, 8041, 8042, 8054, 8055, 8056, 8057, 8060, 8063, 8064, 8065, 8066,8068, 8069

Counters	
Parallel D/I counter	8 ch. max. for one controller. Counter value: 32 bit 500Hz max. Min. pulse width > 1ms Optional parallel D/I boards: i-8040, 8042, 8051, 8052, 8053, 8054, 8055, 8058, 8063, 8077
Serial D/I counter	Counter input: 100Hz max. Counter value: 0 to 65535 (16 bit) Optional serial I-87K D/I boards: i-87051, 87052, 87053, 87054, 87055, 87058, 87063
Remote D/I counter	All remote I-7000 & I-87K D/I modules support counters. 100Hz max. Counter value: 0 to 65535 (16 bit)
High speed counter	i-87082: 100kHz max. 32 bit, i-8080: 450kHz max. 32 bit
Protocols	
Modbus serial protocol	COM1 & COM2 default supports Modbus serial protocol for connecting ISaGRAF, PC/HMI & MMI panels.
Remote I/O	COM3 or COM4 supports I-7000 I/O modules & (I-87K base + I-87K serial I/O boards) as remote I/O. Max. 64 I/O module for one controller
Modbus slave I/O devices	COM1 or COM3 or COM4 ( or COM5 if multi-serial port boards are plugged) supports Modbus master protocol to connect to other Modbus slave I/O devices
Fbus	A software mechanism built in COM3 port to exchange data between ICP DAS's ISaGRAF controllers.
SMS: Short Message Service	COM4 or COM5 can link to a GSM modem to support SMS. User can request data or control the controller by cellular phone. The controller can also send data & alarms to user's cell. phone. Optional GSM modems: GM29:GSM 900/1800 MHz
User defined protocol	User can write his own protocol applied at COM1, COM3, COM4 (& COM5 to COM20 if multi-serial port boards are plugged).
Modem_Link	Supports PC remotely download & monitor I-8417/8817/8437/8837 through a normal modem.
MMICON / LCD	COM3 or COM4 supports ICP DAS's MMICON. The MMICON is featured with a 240 x 64 dot LCD and a 4 x 4 Keyboard. User can use it to display picture, string, integer, float, and input a character, string, integer and float.
Redundant Bus7000	Two ISaGRAF controllers can link to remote I-7000 & I-87K I/O modules at the same time. Only one controller is active to control these remote I/Os. If one is dead, the other one will take over the control of remote I/Os.
Battery backup SRAM	
	Data, date & time can be stored at S256/S512, and then PC can load these data via COM1 or COM2. PC can also download pre-defined data to the S256/S512. Optional: S256: 256kbytes, S512: 512kbytes

## Specifications: I-7188EG

<b>Power supply</b>	
Power requirements	10 to 30VDC (unregulated)
Power consumption	7188EG:2W , 7188EGD: 3W
Protection	Built-in power protection & network protection circuit
<b>General environment</b>	
Operating temperature	-25°C to +75°C
Storage temperature	-40°C to +85°C
Humidity	0 to 95 % (non-condensed)
<b>System</b>	
CPU	Am188™ES,40MHz, or compatible
Watchdog timer	1.6 second
Real time clock	Year-2000 compliance. Gives hour, minute, sec, date of week, date of month, month & year (1980 to 2079)
SRAM	512Kbytes
FLASH Memory	512Kbytes, Erase unit is 64K bytes, 100,000 erase/write cycles
NVSRAM	31 bytes, battery backup, data valid up to 10 years
EEPROM	2048 bytes, retention > 100 years. 1,000,000 erase/write cycles
Display for I-7188EGD	Five 7-Seg. Led on the front. It can display message & value.
Expansion I/O bus	One optional Xxxx series I/O board can be plugged inside I-7188EG/D.
NET ID	Set by software
<b>Ethernet port</b>	
	10M bps, NE2000 compatible, 10 BaseT, Program download port.
<b>Serial ports</b>	
COM1	RS232: TXD,RXD,RTS,CTS,GND, Speed: 115200 bps max. Program download port.
COM2	RS485: D+, D- , Speed: 115200 bps max. Self-tuner ASIC inside
<b>Development software</b>	
ISaGRAF	Supports IEC61131-3 standard. Programming languages: LD, ST, FBD, SFC, IL & FC
<b>PWM output</b>	
Pulse Width Modulation output	All Xxxx series D/O boards support PWM output. 8 channels max. for one controller. 500Hz max. for Off=1 & On=1 ms Output square curve: Off: 1 to 32767 ms, On: 1 to 32767 ms

Counters	
Parallel D/I counter	All Xxxx series D/I boards support D/I counter. 8 ch. max. for one controller. Counter value: 32 bit 500Hz max. Min. pulse width > 1ms
Remote D/I counter	All remote I-7000 & I-87K D/I modules support counters. 100Hz max. Counter value: 0 to 65535 (16 bit)
Remote high speed counter	Optional i-87082:100kHz max. , 32 bit
Protocols	
Modbus serial protocol	COM1 default supports Modbus serial protocol for connecting ISaGRAF, PC/HMI & MMI panels.
Modbus TCP/IP protocol	Ethernet port supports Modbus TCP/IP protocol for connecting ISaGRAF & PC/HMI.
Remote I/O	COM2 (or COM3:RS485 if found) supports I-7000 I/O modules & (I-87K base + I-87K serial I/O boards) as remote I/O. Max. 64 I/O modules for one controller
Modbus slave I/O devices	COM1 or COM2 (or COM3 if found) supports Modbus master protocol to connect to other Modbus slave I/O devices
Fbus	A software mechanism built in COM2 port to exchange data between ICP DAS's IsaGRAF controllers.
Ebus	A software mechanism built in Ethernet port to exchange data between ICP DAS's ISaGRAF Ethernet controllers.
SMS: Short Message Service	(COM3:RS232 or COM4:RS232 if found) can link to a GSM modem to support SMS. User can request data or control the controller by cellular phone. The controller can also send data & alarms to user's cell. phone. Optional GSM modems: GM29:GSM 900/1800 MHz
User defined protocol	User can write his own protocol applied at COM1, COM2 & (COM3 to COM8 if found).
MMICON / LCD	(COM3:RS232 if found) supports ICP DAS's MMICON. The MMICON is featured with a 240 x 64 dot LCD and a 4 x 4 Keyboard. User can use it to display picture, string, integer, float, and input a character, string, integer and float.
Redundant Bus7000	Two ISaGRAF controllers can link to remote I-7000 & I-87K I/O modules at the same time. Only one controller is active to control these remote I/Os. If one is dead, the other one will take over the control of remote I/Os.
Battery backup SRAM	
	Data, date & time can be stored at X607/X608, and then PC can load these data via COM1. PC can also download pre-defined data to the X607/X608. Optional: X607:128kbytes , X608:512kbytes

## Specifications: I-7188XG

<b>Power supply</b>	
Power requirements	10 to 30VDC (unregulated)
Power consumption	7188XG:2W , 7188XGD: 3W
Protection	Built-in power protection & network protection circuit
<b>General environment</b>	
Operating temperature	-25°C to +75°C
Storage temperature	-40°C to +85°C
Humidity	0 to 95 % (non-condensed)
<b>System</b>	
CPU	Am188™ES,40MHz, or compatible
Watchdog timer	1.6 second
Real time clock	Year-2000 compliance. Gives hour, minute, sec, date of week, date of month, month & year (1980 to 2079)
SRAM	512Kbytes
FLASH Memory	512Kbytes, Erase unit is 64K bytes, 100,000 erase/write cycles
NVSRAM	31 bytes, battery backup, data valid up to 10 years
EEPROM	2048 bytes, retention > 100 years. 1,000,000 erase/write cycles
Display for I-7188XGD	Five 7-Seg. Led on the front. It can display message & value.
Expansion I/O bus	One optional Xxxx series I/O board can be plugged inside I-7188XG/D.
NET ID	Set by software
<b>Serial ports</b>	
COM1	Can be used as RS232 or RS485 , Speed: 115200 bps max. RS232 TXD,RXD,RTS,CTS,GND RS485: D+, D-, self-tuner inside Program download port.
COM2	RS485: D+, D- , Self-tuner ASIC inside , Speed: 115200 bps max.
<b>Development software</b>	
ISaGRAF	Supports IEC61131-3 standard. Programming languages: LD, ST, FBD, SFC, IL & FC
<b>PWM output</b>	
Pulse Width Modulation output	All Xxxx series D/O boards support PWM output. 8 channels max. for one controller. 500Hz max. for Off=1 & On=1ms Output square curve: Off: 1 to 32767 ms, On: 1 to 32767 ms

Counters	
Parallel D/I counter	All Xxxx series D/I boards support D/I counter. 8 ch. max. for one controller. Counter value: 32 bit, 500Hz max. Min. pulse width > 1ms
Remote D/I counter	All remote I-7000 & I-87K D/I modules support counters. 100Hz max. , Counter value: 0 to 65535 (16 bit)
Remote high speed counter	Optional i-87082:100kHz max. 32 bit
Protocols	
Modbus serial protocol	COM1 supports Modbus serial protocol for connecting PC/HMI & MMI panels.
Remote I/O	COM2 (or COM3:RS485 if found) supports I-7000 I/O modules & (I-87K base + I-87K serial I/O boards) as remote I/O.Max. 64 I/O modules for one controller
Modbus slave I/O devices	COM2 (or COM3 if found) supports Modbus master protocol to connect to other Modbus slave I/O devices
Fbus	A software mechanism built in COM2 port to exchange data between ICP DAS's IsaGRAF controllers.
SMS: Short Message Service	(COM3:RS232 or COM4:RS232 if found) can link to a GSM modem to support SMS. User can request data or control the controller by cellular phone. The controller can also send data & alarms to user's cell. phone. Optional GSM modems: GM29:GSM 900/1800 MHz
User defined protocol	User can write his own protocol applied at COM2 & (COM3 to COM8 if found).
MMICON / LCD	(COM3:RS232 if found) supports ICP DAS's MMICON. The MMICON is featured with a 240 x 64 dot LCD and a 4 x 4 Keyboard. User can use it to display picture, string, integer, float, and input a character, string, integer and float.
Redundant Bus7000	Two ISaGRAF controllers can link to remote I-7000 & I-87K I/O modules at the same time. Only one controller is active to control these remote I/Os. If one is dead, the other one will take over the control of remote I/Os.
Battery backup SRAM	
	Data, date & time can be stored at X607/X608, and then PC can load these data via COM1. PC can also download pre-defined data to the X607/X608. Optional: X607:128kbytes , X608:512kbytes



## Selection Guide

<b>Power supply</b>	
ACE-540A	24V/1.7A power supply(panel Mount)
DIN-540A	24V/1.7A power supply(DIN-Rail mount)
KA-52F	24V/1A power supply(no mounting)
DIN-KA52F	24V/1A power supply(DIN-Rail mountong)
KWM020-1824F	24V/0.75A power supply (No-mounting)
<b>Development tools</b>	
ISaGRAF-256	ISaGRAF Workbench Software, up to 256 I/O tags.
ISaGRAF Book-E	User's manual of ISaGRAF controllers (English)
ISaGRAF Book-C	User's manual of ISaGRAF controllers (Chinese, traditional)
<b>ISaGRAF controller</b>	
I-8417	ISaGRAF I-8000 controller, 4 empty slots
I-8817	ISaGRAF I-8000 controller, 8 empty slots
I-8437	ISaGRAF I-8000 ethernet controller, 4 empty slots
I-8837	ISaGRAF I-8000 ethernet controller, 8 empty slots
I-7188XG	ISaGRAF I-7188 controller
I-7188XGD	ISaGRAF I-7188 controller with display
I-7188EG	ISaGRAF I-7188 ethernet controller
I-7188EGD	ISaGRAF I-7188 ethernet controller with display
W-8037	ISaGRAF Wincon-8000 controller, No I/O slot
W-8337	ISaGRAF Wincon-8000 controller, 3 empty slots
W-8737	ISaGRAF Wincon-8000 controller, 7 empty slots
<b>Battery backup SRAM</b>	
S256	256Kbytes battery backup SRAM for I-8417 /8817/8437/8837
S512	512Kbytes battery backup SRAM for I-8417 /8817/8437/8837
X607	128Kbytes battery backup SRAM for I-7188XG/7188EG
X608	512Kbytes battery backup SRAM for I-7188XG/7188EG
<b>MMICON / LCD</b>	
MMICON + 240x64 Graphic LCD	
<b>GSM modem</b>	
GM29	900/1800 GSM/GPRS External Modem
<b>I-87K expansion base</b>	
I-87K4	Remote I-87K I/O base, 4 empty slots
I-87K5	Remote I-87K I/O base, 5 empty slots
I-87K8	Remote I-87K I/O base, 8 empty slots
I-87K9	Remote I-87K I/O base, 9 empty slots
<b>Motion control board</b>	
I-8091	2-axes stepping/servo motor control card
I-8090	3-axes encoder card

<b>Timer/Counter board</b>	
I-8080	4-ch. counter/frequency, 32 bit
I-87082	2 channel counter/Frequency, 32 bit
<b>Multi-serial board</b>	
I-8112	2 port RS232
I-8114	4 port RS232
I-8142	2 port RS485/422
I-8144	4 port RS485/422
<b>Parallel analog I/O board</b>	
I-8017H	8-ch. 14-bit analog input, each ch. can be different input type (V, mA) & range
I-8024	4-ch. 14-bit analog output, each ch. can be different output type (V, mA) & range
<b>Parallel digital I/O board</b>	
I-8037	16-ch. isolated open-drain output
I-8040	32-ch. isolated digital input
I-8041	32-ch. isolated digital output
I-8042	Isolated digital 16-ch. input & 16-ch. output
I-8051	16-ch. non-isolated digital input
I-8052	8-ch. isolated digital input (differential)
I-8053	16-ch. isolated digital input (single ended)
I-8054	Isolated digital 8-ch. input & 8-ch. output
I-8055	Non-isolated digital 8ch. input & 8ch. output
I-8056	16-ch. non-isolated O.C. output
I-8057	16-ch. isolated O.C. output
I-8058	8-ch. isolated digital input, AC/DC
I-8060	6-ch. relay output
I-8063	Isolated digital 4-ch. input & 4-ch. relay
I-8064	8-ch. power relay output
I-8065	8-ch. SSR-AC output
I-8066	8-ch. SSR-DC output
I-8068	8-ch. relay output
I-8069	8-ch. Photo Mos relay output
I-8077	8-ch. digital input & 8-ch. output simulator
<b>Serial analog I/O board</b>	
I-87013	4-ch. RTD input
I-87017	8-ch. analog input
I-87018	8-ch. thermocouple input
I-87022	2-ch. 12-bit analog output, each ch. can be different output type (V, mA) & range
I-87024	4-ch. 14-bit analog output
I-87026	2-ch. 16-bit analog output, each ch. can be different output type (V, mA) & range

<b>Serial digital I/O board</b>	
I-87051	16-ch. non-isolated digital input
I-87052	8-ch. isolated digital input (differential)
I-87053	16-ch. isolated digital input (single ended)
I-87054	Isolated digital 8-ch. input & 8-ch. output
I-87055	Non-isolated digital 8ch. input & 8ch. output
I-87057	16-ch. isolated O.C. output
I-87058	8-ch. isolated digital input, AC/DC
I-87063	Isolated digital 4-ch. input & 4-ch. relay
I-87064	8-ch. power relay output
I-87065	8-ch. SSR-AC output
I-87066	8-ch. SSR-DC output
I-87068	8-ch. relay output
<b>Converter &amp; Repeater</b>	
PCISA-7520R	PCI/ISA bus RS-232 to RS-485/422 card
PCISA-7520AR	RS-232 to RS-422/RS-485 card with D-sub 9-pin cable
I-7520	RS-232 to RS-485 converter
I-7520R	I-7520 with 3000V DC isolation at RS-485 side
I-7520A	RS-232 to RS-422/RS-485 converter
I-7520AR	I-7520A with 3000V DC isolation at RS-485 side
I-7561	USB to RS-232/422/485 Converter
I-7510	RS-485 isolated high speed repeater
I-7510R	RS485/RS422 isolated high speed repeater
I-7510AR	Three way Isolated RS-422/485 Repeater
<b>RS485 Hub</b>	3-way isolated RS485 to 3 ports RS485 hub
<b>Man Machine Interface</b>	
Touch506L	5.7" 4-Gray STN Panel display with touch
Touch506S	5.7" Color STN Panel display with touch
Touch510T	10.4" Color TFT Panel Display With Touch
<b>Wireless Modem</b>	
SST-2450	Wireless Modem Module with RS-232/RS-485 Interface
<b>I-7000 analog I/O module</b>	
I-7011	1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O
I-7011D	I-7011 with display
I-7011P	1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O
I-7011PD	I-7011P with display
I-7012	1-ch. analog input (16-bit), 1-ch. D/I & 2-ch. D/O
I-7012D	I-7012D with display
I-7012F	Fast mode I-7012 (12-bit), normal 16-bit
I-7012FD	I-7012F with display
I-7013	1-ch. RTD input (16-bit)

I-7013D	I-7013 with display
I-7033	3-ch. RTD input (16-bit)
I-7033D	I-7033 with display
I-7014D	1-ch. analog/transmitter input (16-bit) with display, 1-ch. D/I & 2-ch. D/O
I-7016	1-ch. strained gauge input (16-bit), 1-ch. D/I & 4-ch. D/O
I-7016D	I-7016 with display
I-7016P	1-ch. strained gauge input (16-bit), 1-ch. D/I & 4-ch. D/O
I-7016PD	I-7016 with display
I-7017	8-ch. analog input (16-bit)
I-7017F	Fast mode I-7017 (12-bit), normal (16-bit)
I-7018	8-ch. thermocouple input (16-bit)
I-7018P	8-ch. thermocouple input (16-bit)
I-7021	1-ch. analog output (12-bit)
I-7021P	1-ch. analog output (16-bit)
I-7022	2-ch. analog output (12-bit), each ch. can be different output type (V,mA) & range
I-7024	4-ch. analog output (14-bit)
<b>I-7000 digital I/O module</b>	
I-7041	14-ch. isolated digital input
I-7041D	I-7041 with LED display
I-7042	13-ch. isolated O.C. output
I-7042D	I-7042 with LED display
I-7043	16-ch. non-isolated O.C. output
I-7043D	I-7043 with LED display
I-7044	Isolated digital 4-ch. input & 8-ch. output
I-7044D	I-7044 with LED display
I-7050	7-ch. digital input & 8-ch. output
I-7050D	I-7050 with LED display
I-7050A	7 digital input & 8 output (current source)
I-7050AD	I-7050A with LED display
I-7052	8-ch. isolated digital input (6 differential + 2 single end)
I-7052D	I-7052 with LED display
I-7053	16-ch. digital input
I-7053D	I-7053 with LED display
I-7060	4-ch. isolated input & 4-ch. relay output
I-7060D	I-7060 with LED display
I-7063	8-ch. isolated input & 3ch. power relay
I-7063D	I-7063D with LED display
I-7063A	8-ch. isolated input & 3ch. AC-SSR output
I-7063AD	I-7063A with LED display
I-7063B	8-ch. isolated input & 3ch. DC-SSR output
I-7063BD	I-7063B with LED display
I-7065	4-ch. isolated input & 5ch. power relay
I-7065D	I-7065 with LED display
I-7065A	4-ch. isolated input & 5ch. AC-SSR relay

I-7065AD	I-7065A with LED display
I-7065B	4-ch. isolated input & 5ch. DC-SSR relay
I-7065BD	I-7065B with LED display
I-7066	7-ch. Photo Mos relay output
I-7066D	I-7066 with LED display
I-7067	7-ch. relay output
I-7067D	I-7067 with LED display
I-7000 counter module	
I-7080	2 high speed counter/frequency input
I-7080D	I-7080 with display
Parallel I/O board	For I-7188XG & I-7188EG
X107	6-ch. D/I and 7-ch. D/O
X109	7-ch. PhotoMos Relay
X110	14-ch. D/I
X111	13-ch. D/O
X119	7-ch. D/O and 7-ch. D/I
X202	7-ch. A/D (0~20mA)
X203	2-ch. A/D (0~20mA), 2-ch. D/I, 6-ch. D/O
X303	1-ch. A/D (+/-5V), 1-ch. D/A (+/-5V), 4-ch. D/I, 6-ch. D/O
X304	3-ch. A/D (+/-5V), 1-ch. D/A (+/-5V), 4-ch. D/I, 4-ch. D/O
X305	7-ch. A/D (+/-5V), 1-ch. D/A (+/-5V), 2-ch. D/I, 2-ch. D/O
X307	8-ch. A/D (+/-10V), 2-ch. D/I, 2-ch. D/O (will be available)
X308	4-ch. A/D (+/-10V), 6-ch. D/O (will be available)
X310	ch. A/D (0~10V), 1-ch. A/D (0~20mA), 2-ch. D/A (0~10V), 3-ch. D/I, 3-ch. D/O
RS232/422/485 board	For I-7188XG & I-7188EG
X503	1-Port RS-232 (5-Pin)
X504	2-Port RS-232 (5-Pin ) and (9-Pin)
X505	3-Port RS-232 (5-Pin)
X506	6-Port RS-232 (3-Pin)
X507	1-Port RS-422/485, 4-ch. D/I, 4-ch. D/O
X508	1-Port RS-232 (5-Pin), 4-ch. D/I, 4-ch. D/O
X509	2-Port RS-232 (3-Pin), 4-ch. D/I, 4-ch. D/O
X510	1-Port RS-232 (3-Pin ), 5-ch. D/I, 5-ch. D/O, EEPROM 128K x2
X511	3-Port RS-485
X512	4-Port RS-232 (3-Pin) ,1-ch. RS-485 (will be available)