# Specifications: I-8437 / 8837

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
Conorol onvironment	
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 compatiable
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 & ouput.
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
Ethernet port	
Ethemet port	10M bps, NE2000 compatible, 10 BaseT, Program download port.
Serial ports	
COM1	RS232: TXD,RXD,GND, Speed: 115200 bps max.
	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	
	8 channels max. for one controller.
output	500Hz max. for Off=1 & On=1 ms
output	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

1

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,
Serial D/I counter	8054, 8055, 8058, 8063, 8077 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: 5kHz max. 32 bit
Protocols	
Modbus serial protocol	COM1 supports Modbus serial protocol for connecting PC/HMI & MMI panels.
Modbus TCP/IP protocol	Ethernet port supports Modbus TCP/IP protocol for connecting PC/HMI.
Remote I/O	COM3 & 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	COM3 & COM4 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 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: M1203A: GSM 900/1800 MHz M1213A: GSM 900/1900 MHz
User defined protocol	User can write his own protocol applied at 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 & 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
PID	Software provides PID function

2

### 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 compatiable
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 & ouput.
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	
Serial ports	RS232: TXD RXD GND Speed: 115200 bps max
Serial ports COM1	RS232: TXD,RXD,GND, Speed: 115200 bps max.
COM1	Program download port.
	Program download port. RS485: Data+, Data-, Speed: 115200 bps max.
COM1 COM2	Program download port. RS485: Data+, Data-, Speed: 115200 bps max. Self-tuner ASIC inside, Program download port.
COM1	Program download port. RS485: Data+, Data-, Speed: 115200 bps max. Self-tuner ASIC inside, Program download port. Can be configed as RS232 or S485, Speed: 115200 bps max.
COM1 COM2 COM3	Program download port. RS485: Data+, Data-, Speed: 115200 bps max. Self-tuner ASIC inside, Program download port. Can be configed as RS232 or S485, Speed: 115200 bps max. RS232: TXD,RXD,RTS,CTS,GND, RS485: Data+, Data-
COM1 COM2	Program download port. RS485: Data+, Data-, Speed: 115200 bps max. Self-tuner ASIC inside, Program download port. Can be configed as RS232 or S485, Speed: 115200 bps max. RS232: TXD,RXD,RTS,CTS,GND, RS485: Data+, Data- RS232: Full modem signals, Speed: 115200 bps max.
COM1 COM2 COM3 COM4	Program download port. RS485: Data+, Data-, Speed: 115200 bps max. Self-tuner ASIC inside, Program download port. Can be configed as RS232 or S485, Speed: 115200 bps max. RS232: TXD,RXD,RTS,CTS,GND, RS485: Data+, Data-
COM1 COM2 COM3 COM4 Development software	Program download port. RS485: Data+, Data-, Speed: 115200 bps max. Self-tuner ASIC inside, Program download port. Can be configed as RS232 or S485, Speed: 115200 bps max. RS232: TXD,RXD,RTS,CTS,GND, RS485: Data+, Data- RS232: Full modem signals, Speed: 115200 bps max. TXD,RXD,RTS,CTS,DSR,DTR,CD,RI,GND.
COM1 COM2 COM3 COM4	Program download port. RS485: Data+, Data-, Speed: 115200 bps max. Self-tuner ASIC inside, Program download port. Can be configed as RS232 or S485, Speed: 115200 bps max. RS232: TXD,RXD,RTS,CTS,GND, RS485: Data+, Data- RS232: Full modem signals, Speed: 115200 bps max.
COM1 COM2 COM3 COM4 Development software ISaGRAF	Program download port. RS485: Data+, Data-, Speed: 115200 bps max. Self-tuner ASIC inside, Program download port. Can be configed as RS232 or S485, Speed: 115200 bps max. RS232: TXD,RXD,RTS,CTS,GND, RS485: Data+, Data- RS232: Full modem signals, Speed: 115200 bps max. TXD,RXD,RTS,CTS,DSR,DTR,CD,RI,GND.
COM1 COM2 COM3 COM4 Development software	Program download port. RS485: Data+, Data-, Speed: 115200 bps max. Self-tuner ASIC inside, Program download port. Can be configed as RS232 or S485, Speed: 115200 bps max. RS232: TXD,RXD,RTS,CTS,GND, RS485: Data+, Data- RS232: Full modem signals, Speed: 115200 bps max. TXD,RXD,RTS,CTS,DSR,DTR,CD,RI,GND. IEC61131-3 standard. Languages: LD, ST, FBD, SFC, IL & FC
COM1 COM2 COM3 COM4 Development software ISaGRAF	Program download port. RS485: Data+, Data-, Speed: 115200 bps max. Self-tuner ASIC inside, Program download port. Can be configed as RS232 or S485, Speed: 115200 bps max. RS232: TXD,RXD,RTS,CTS,GND, RS485: Data+, Data- RS232: Full modem signals, Speed: 115200 bps max. TXD,RXD,RTS,CTS,DSR,DTR,CD,RI,GND. IEC61131-3 standard. Languages: LD, ST, FBD, SFC, IL & FC The I-8417/8817/8437/8837 can integrate with one I-8091(2-axes)
COM1 COM2 COM3 COM4 Development software ISaGRAF	Program download port. RS485: Data+, Data-, Speed: 115200 bps max. Self-tuner ASIC inside, Program download port. Can be configed as RS232 or S485, Speed: 115200 bps max. RS232: TXD,RXD,RTS,CTS,GND, RS485: Data+, Data- RS232: Full modem signals, Speed: 115200 bps max. TXD,RXD,RTS,CTS,DSR,DTR,CD,RI,GND. IEC61131-3 standard. Languages: LD, ST, FBD, SFC, IL & FC 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
COM1 COM2 COM3 COM4 Development software ISaGRAF Motion control	Program download port. RS485: Data+, Data-, Speed: 115200 bps max. Self-tuner ASIC inside, Program download port. Can be configed as RS232 or S485, Speed: 115200 bps max. RS232: TXD,RXD,RTS,CTS,GND, RS485: Data+, Data- RS232: Full modem signals, Speed: 115200 bps max. TXD,RXD,RTS,CTS,DSR,DTR,CD,RI,GND. IEC61131-3 standard. Languages: LD, ST, FBD, SFC, IL & FC The I-8417/8817/8437/8837 can integrate with one I-8091(2-axes)
COM1 COM2 COM3 COM4 Development software ISaGRAF Motion control PWM output	Program download port. RS485: Data+, Data-, Speed: 115200 bps max. Self-tuner ASIC inside, Program download port. Can be configed as RS232 or S485, Speed: 115200 bps max. RS232: TXD,RXD,RTS,CTS,GND, RS485: Data+, Data- RS232: Full modem signals, Speed: 115200 bps max. TXD,RXD,RTS,CTS,DSR,DTR,CD,RI,GND. IEC61131-3 standard. Languages: LD, ST, FBD, SFC, IL & FC 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.
COM1 COM2 COM3 COM4 Development software ISaGRAF Motion control PWM output Pulse Width Modulation	Program download port. RS485: Data+, Data-, Speed: 115200 bps max. Self-tuner ASIC inside, Program download port. Can be configed as RS232 or S485, Speed: 115200 bps max. RS232: TXD,RXD,RTS,CTS,GND, RS485: Data+, Data- RS232: Full modem signals, Speed: 115200 bps max. TXD,RXD,RTS,CTS,DSR,DTR,CD,RI,GND. IEC61131-3 standard. Languages: LD, ST, FBD, SFC, IL & FC 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. 8 channels max. for one controller.
COM1 COM2 COM3 COM4 Development software ISaGRAF Motion control PWM output	Program download port. RS485: Data+, Data-, Speed: 115200 bps max. Self-tuner ASIC inside, Program download port. Can be configed as RS232 or S485, Speed: 115200 bps max. RS232: TXD,RXD,RTS,CTS,GND, RS485: Data+, Data- RS232: Full modem signals, Speed: 115200 bps max. TXD,RXD,RTS,CTS,DSR,DTR,CD,RI,GND. IEC61131-3 standard. Languages: LD, ST, FBD, SFC, IL & FC 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. 8 channels max. for one controller. 500Hz max. for Off=1 & On=1 ms
COM1 COM2 COM3 COM4 Development software ISaGRAF Motion control PWM output Pulse Width Modulation	Program download port. RS485: Data+, Data-, Speed: 115200 bps max. Self-tuner ASIC inside, Program download port. Can be configed as RS232 or S485, Speed: 115200 bps max. RS232: TXD,RXD,RTS,CTS,GND, RS485: Data+, Data- RS232: Full modem signals, Speed: 115200 bps max. TXD,RXD,RTS,CTS,DSR,DTR,CD,RI,GND. IEC61131-3 standard. Languages: LD, ST, FBD, SFC, IL & FC 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. 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
COM1 COM2 COM3 COM4 Development software ISaGRAF Motion control PWM output Pulse Width Modulation	Program download port. RS485: Data+, Data-, Speed: 115200 bps max. Self-tuner ASIC inside, Program download port. Can be configed as RS232 or S485, Speed: 115200 bps max. RS232: TXD,RXD,RTS,CTS,GND, RS485: Data+, Data- RS232: Full modem signals, Speed: 115200 bps max. TXD,RXD,RTS,CTS,DSR,DTR,CD,RI,GND. IEC61131-3 standard. Languages: LD, ST, FBD, SFC, IL & FC 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. 8 channels max. for one controller. 500Hz max. for Off=1 & On=1 ms

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: 5kHz max. 32 bit
Protocols	
Modbus serial protocol	COM1 & COM2 supports Modbus serial protocol for connecting PC/HMI & MMI panels.
Remote I/O	COM3 & 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	
	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	COM4 can link to a GSM modem to support SMS. User can
Service	request data or control the controller by cellular phone. The
	controller can also send data & alarms to user's cell. phone.
	Optional GSM modems:
	M1203A: GSM 900/1800 MHz
	M1213A: GSM 900/1900 MHz
User defined protocol	User can write his own protocol applied at 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 & 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,
Redundant Rusz000	string, integer and float. Two ISaGRAF controllers can link to remote I-7000 & I-87K I/O
Redundant Bus7000	
	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
חום	Software provides PID function
PID	Software provides PID function

4

# Specifications: I-7188EG

Power supply	
Power requirements	10 to 30VDC (unregulated)
Power consumption	7188EG:2W , 7188EGD: 3W
Protection	Built-in power protection & network protection circuit
General environment	
Operating temperature	-25°C to +75°C
Storage temperature	-40°C to +85°C
Humidity	0 to 95 % (non-condensed)
System	
CPU	Am188™ES,40MHz, or compatiable
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
Ethernet port	
	10M bps, NE2000 compatible, 10 BaseT, Program download port.
Serial ports	
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
Development software	
ISaGRAF	Supports IEC61131-3 standard. Programming languages: LD, ST,
	FBD, SFC, IL & FC
PWM output	
	All Xxxx series D/O boards support PWM output.
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.
Remote D/I counter	
	100Hz max. Counter value: 0 to 65535 (16 bit)
Remote high speed	Optional i-87082:100kHz max. , 32 bit
counter	
Protocols	
Modbus serial protocol	COM1 supports Modbus serial protocol for connecting PC/HMI & MMI panels.
Modbus TCP/IP protocol	Ethernet port supports Modbus TCP/IP protocol for connecting 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	COM2 (or COM3 if found) supports Modbus master protocol to
would slave i/O devices	
	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	(COM3:RS232 or COM4:RS232 if found) can link to a GSM
Service	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:
	M1203A: GSM 900/1800 MHz , M1213A: GSM 900/1900 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,
De dure de ret Dure 7000	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
PID	Software provides PID function

# Specifications: I-7188XG

Power supply	
Power requirements	10 to 30VDC (unregulated)
Power consumption	7188XG:2W , 7188XGD: 3W
Protection	Built-in power protection & network protection circuit
General environment	
Operating temperature	-25°C to +75°C
Storage temperature	-40°C to +85°C
Humidity	0 to 95 % (non-condensed)
System	
CPU	Am188™ES,40MHz, or compatiable
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
Serial ports	
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.
Development software	
ISaGRAF	Supports IEC61131-3 standard. Programming languages: LD, ST,
	FBD, SFC, IL & FC
PWM output	
	All Xxxx series D/O boards support PWM output.
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)
<b>S</b> 1	Optional i-87082:100kHz max. 32 bit
counter	
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.
6	(COM3:RS232 or COM4:RS232 if found) can link to a GSM
Service	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:
	M1203A: GSM 900/1800 MHz
Lloor defined protocol	M1213A: GSM 900/1900 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.
Detter the alway ODAM	
Battery backup SRAM	Data data 8 time can be stared at VC07/VC00, and then DC can
	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
PID	Software provides PID function

### **Selection Guide**

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(DIN-Rail mount)     KX-52F   24V/1A power supply(DIN-Rail mount)     KW020-1824F   24V/0.75A power supply (No-mounting)     Development tools	Power supply	
DIN-540A   24V/1.7A power supply(DIN-Rail mount)     KA-52F   24V/1A power supply(DIN-Rail mounting)     DIN-KA52F   24V/0.75A power supply(DIN-Rail mountong)     KWM020-1824F   24V/0.75A power supply (No-mounting)     Development tools		24V/1.7A power supply(panel 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)     Development tools   ISaGRAF-256     ISaGRAF-256   ISaGRAF Workbench Software, up to 256 I/O tags.     ISaGRAF Book-E   User's manual of ISaGRAF controllers (English)     ISaGRAF controller   IsaGRAF is a controllers (English)     ISaGRAF controller   IsaGRAF is a controller, 4 empty slots     I-8417   ISaGRAF is a controller, 4 empty slots     I-8417   ISaGRAF is a controller, 8 empty slots     I-8417   ISaGRAF is a controller, 4 empty slots     I-8417   ISaGRAF is a controller, 8 empty slots     I-8437   ISaGRAF is a controller     I-7188XGD   ISaGRAF is a controller     I-7188XGD   ISaGRAF is a controller     I-7188XGD   ISaGRAF is a controller with display     IVIEW-100-ISaGRAF   ISaGRAF is a controller     I-7188EGD   ISaGRAF is a controller     S256   256Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & NVIEW-100-ISaGRAF     S512   512Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & NVIEW-100-ISaGRAF     K607   128Kbytes battery backup SRAM for I-7188XG	DIN-540A	
DIN-KA52F   24V/1A power supply(DIN-Rail mountong)     KWM020-1824F   24V/0.75A power supply (No-mounting)     Development tools   ISaGRAF-256     ISaGRAF Book-E   User's manual of ISaGRAF controllers (English)     ISaGRAF Book-C   User's manual of ISaGRAF controllers (English)     ISaGRAF Footroller   ISaGRAF is annual of ISaGRAF controllers (Chinese, traditional)     ISaGRAF controller   ISaGRAF is a controller, 4 empty slots     I-8417   ISaGRAF is a controller, 4 empty slots     I-8437   ISaGRAF is a controller, 4 empty slots     I-8437   ISaGRAF is a controller     I-8437   ISaGRAF is a controller     I-7188XGD   ISaGRAF is a controller     I-7188XGD   ISaGRAF is a controller     I-7188EG   ISaGRAF     S256   256Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAF     S607   128Kbytes battery backup SRAM for I-7188XG/7188EG     X608   512Kbytes battery backup SRAM f	KA-52F	
KWM020-1824F   24V/0.75A power supply (No-mounting)     Development tools   [SaGRAF-256     ISaGRAF Book-E   User's manual of ISaGRAF controllers (English)     ISaGRAF Book-C   User's manual of ISaGRAF controllers (Chinese, traditional)     ISaGRAF controller   [SaGRAF controller     I-8417   ISaGRAF I-8000 controller, 4 empty slots     I-8417   ISaGRAF I-8000 controller, 8 empty slots     I-8437   ISaGRAF I-8000 entroller, 8 empty slots     I-8437   ISaGRAF I-8000 entroller controller, 8 empty slots     I-7188XG   ISaGRAF I-7188 controller     I-7188XG   ISaGRAF I-7188 controller     I-7188EG   ISaGRAF I-7188 ethernet controller, 7     I-7188EG   ISaGRAF I-7188 ethernet controller     I-7188EG   ISaGRAF IVIEW-100 controller     IVIEW-100-ISaGRAF   ISaGRAF IVIEW-100 controller     S256   256Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAF     S512   512Kbytes battery backup SRAM for I-7188XG/7188EG     X607   128Kbytes battery backup SRAM for I-7188XG/7188EG     X608   512Kbytes battery backup SRAM for I-7188XG/7188EG     X607   128Kbytes battery backup SRAM for I-7188XG/7188EG     X608   512Kbytes b	DIN-KA52F	
Development tools     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)     ISaGRAF controller   ISaGRAF controller     I-8417   ISaGRAF I-8000 controller, 4 empty slots     I-8417   ISaGRAF I-8000 ethernet controller, 4 empty slots     I-8437   ISaGRAF I-8000 ethernet controller, 8 empty slots     I-7188XG   ISaGRAF I-7188 controller     I-7188XGD   ISaGRAF I-7188 controller     I-7188XGD   ISaGRAF I-7188 ethernet controller     I-7188EG   ISaGRAF I-7188 ethernet controller     I-7188EGD   ISaGRAF I-7188 ethernet controller     IVIEW-100-ISaGRAF   ISaGRAF I-7188 ethernet controller     IVIEW-100-ISaGRAF   ISaGRAF     S512   512Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAF     S607   128Kbytes battery backup SRAM for I-7188XG/7188EG     X607   128Kbytes battery backup SRAM for I-7188XG/7188EG     MMICON / LCD   MMICON + 240x64 Graphic LCD     GSM modem   IVIEW-100 GSM/GPRS External Modem     M1213A   900/1800 GSM/GPRS External Modem	KWM020-1824F	
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)     ISaGRAF Controller   ISaGRAF I-8000 controller, 4 empty slots     I-8417   ISaGRAF I-8000 controller, 8 empty slots     I-8437   ISaGRAF I-8000 ethernet controller, 8 empty slots     I-8837   ISaGRAF I-8000 ethernet controller, 8 empty slots     I-7188XG   ISaGRAF I-7188 controller     I-7188XGD   ISaGRAF I-7188 controller     I-7188XGD   ISaGRAF I-7188 controller     I-7188EGD   ISaGRAF I-7188 controller     I-7188EGD   ISaGRAF IVIEW-100 controller     Battery backup SRAM   S256     S256   256Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAF     S512   512Kbytes battery backup SRAM for I-7188XG/7188EG     X607   128Kbytes battery backup SRAM for I-7188XG/7188EG     X608   512Kbytes battery backup SRAM for I-7188XG/7188EG     <		
ISaGRAF Book-E   User's manual of ISaGRAF controllers (English)     ISaGRAF Book-C   User's manual of ISaGRAF controllers (Chinese, traditional)     SaGRAF controller   ISaGRAF controller     I-8417   ISaGRAF I-8000 controller, 4 empty slots     I-8437   ISaGRAF I-8000 ethernet controller, 4 empty slots     I-8437   ISaGRAF I-8000 ethernet controller, 4 empty slots     I-8437   ISaGRAF I-8000 ethernet controller, 4 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     IVIEW-100-ISaGRAF   ISaGRAF IVIEW-100 controller     Battery backup SRAM   S256     IVIEW-100-ISaGRAF   SI2Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAF     K607   128Kbytes battery backup SRAM for I-7188XG/7188EG     X608   512Kbytes battery backup SRAM for I-7188XG/7188EG     MMICON / LCD   MMICON + 240x64 Graphic LCD     GSM modem   M1203A     M1203A   900/1800 GSM/GPRS External Modem     M1213A   900/1900 GSM/GPRS External Modem     I-87K4   Remote I-87K I/O base, 4 empty s	Development tools	
ISaGRAF Book-E   User's manual of ISaGRAF controllers (English)     ISaGRAF Book-C   User's manual of ISaGRAF controllers (Chinese, traditional)     SaGRAF controller   ISaGRAF controller     I-8417   ISaGRAF I-8000 controller, 4 empty slots     I-8417   ISaGRAF I-8000 ethernet controller, 4 empty slots     I-8437   ISaGRAF I-8000 ethernet controller, 4 empty slots     I-8437   ISaGRAF I-7188 controller     I-7188XG   ISaGRAF I-7188 controller     I-7188KGD   ISaGRAF I-7188 controller with display     I-7188EG   ISaGRAF I-7188 ethernet controller     I-7188EGD   ISaGRAF IVEW-100 controller     IVIEW-100-ISaGRAF   ISaGRAF IVEW-100 controller     Battery backup SRAM   S256     IVIEW-100-ISaGRAF   SI2Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAF     S607   128Kbytes battery backup SRAM for I-7188XG/7188EG     X608   512Kbytes battery backup SRAM for I-7188XG/7188EG     MMICON / LCD   MMICON + 240x64 Graphic LCD     GSM modem   M1203A     M1203A   900/1800 GSM/GPRS External Modem     M1213A   900/1900 GSM/GPRS External Modem     I-87K 4   Remote I-87K I/O base, 4 empty slots		ISaGRAF Workbench Software, up to 256 I/O tags.
ISaGRAF Book-C   User's manual of ISaGRAF controllers (Chinese, traditional)     ISaGRAF controller   ISaGRAF controller     I-8417   ISaGRAF I-8000 controller, 4 empty slots     I-8437   ISaGRAF I-8000 ethernet controller, 4 empty slots     I-8437   ISaGRAF I-8000 ethernet controller, 4 empty slots     I-7188XG   ISaGRAF I-7188 controller     I-7188XGD   ISaGRAF I-7188 controller     I-7188XGD   ISaGRAF I-7188 controller     I-7188EG   ISaGRAF I-7188 ethernet controller     I-7188EGD   ISaGRAF I-7188 ethernet controller     I-7188EGD   ISaGRAF I-7188 ethernet controller     I-7188EGD   ISaGRAF ISAGRAF IVEW-100 controller     Battery backup SRAM   S256     256Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAF     S256   256Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAF     S607   128Kbytes battery backup SRAM for I-7188XG/7188EG     X608   512Kbytes battery backup SRAM for I-7188XG/7188EG     MMICON / LCD   MMICON + 240x64 Graphic LCD     GSM modem   IMI203A     M1203A   900/1800 GSM/GPRS External Modem     M1213A   900/1900 GSM/GPRS External Modem     I-87K4	ISaGRAF Book-E	
ISaGRAF controller     I-8417   ISaGRAF I-8000 controller, 4 empty slots     I-8417   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     IVIEW-100-ISaGRAF   ISaGRAF I-VIEW-100 controller     Battery backup SRAM   S256     256Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & NIEW-100-ISaGRAF     S512   512Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & NIEW-100-ISaGRAF     X607   128Kbytes battery backup SRAM for I-7188XG/7188EG     X608   512Kbytes battery backup SRAM for I-7188XG/7188EG     MMICON / LCD   MMICON + 240x64 Graphic LCD     GSM modem   M1203A   900/1800 GSM/GPRS External Modem     M1213A   900/1900 GSM/GPRS External Modem   M1213A	ISaGRAF Book-C	
I-8417   ISaGRAF I-8000 controller, 4 empty slots     I-8817   ISaGRAF I-8000 entroller, 8 empty slots     I-8437   ISaGRAF I-8000 ethernet controller, 4 empty slots     I-8437   ISaGRAF I-8000 ethernet controller, 4 empty slots     I-8837   ISaGRAF I-8000 ethernet controller, 4 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 IVIEW-100 controller     Battery backup SRAM   ISaGRAF     S256   256Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAF     S512   512Kbytes battery backup SRAM for I-7188XG/7188EG     X607   128Kbytes battery backup SRAM for I-7188XG/7188EG     X608   512Kbytes battery backup SRAM for I-7188XG/7188EG     MMICON / LCD   MMICON + 240x64 Graphic LCD     GSM modem   Image: Steer and Modem     M1203A   900/1800 GSM/GPRS External Modem     M1213A   900/1900 GSM/GPRS External Modem		
I-8817ISaGRAF I-8000 controller, 8 empty slotsI-8437ISaGRAF I-8000 ethernet controller, 4 empty slotsI-8837ISaGRAF I-8000 ethernet controller, 8 empty slotsI-7188XGISaGRAF I-7188 controllerI-7188XGDISaGRAF I-7188 controller with displayI-7188EGISaGRAF I-7188 ethernet controllerI-7188EGDISaGRAF I-7188 ethernet controllerI-7188EGDISaGRAF I-7188 ethernet controllerI-7188EGDISaGRAF I-7188 ethernet controllerI-7188EGDISaGRAF I-7188 ethernet controllerIVIEW-100-ISaGRAFISaGRAF IVIEW-100 controllerBattery backup SRAMS256256Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAFS512512Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAFX607128Kbytes battery backup SRAM for I-7188XG/7188EGX608512Kbytes battery backup SRAM for I-7188XG/7188EGMMICON / LCDMMICON + 240x64 Graphic LCDGSM modem900/1800 GSM/GPRS External ModemM1203A900/1900 GSM/GPRS External ModemM1213A900/1900 GSM/GPRS External ModemI-87K4Remote I-87K I/O base, 4 empty slotsI-87K5Remote I-87K I/O base, 5 empty slots	ISaGRAF controller	
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 controller     I-7188EG   ISaGRAF I-7188 ethernet controller     I-7188EGD   ISaGRAF I-7188 ethernet controller     IVIEW-100-ISaGRAF   ISaGRAF IVIEW-100 controller     Battery backup SRAM   S256     256Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAF     S512   512Kbytes battery backup SRAM for I-7188XG/7188EG     X607   128Kbytes battery backup SRAM for I-7188XG/7188EG     X608   512Kbytes battery backup SRAM for I-7188XG/7188EG     MMICON / LCD   MMICON + 240x64 Graphic LCD     GSM modem   M1213A     900/1800 GSM/GPRS External Modem     M1213A   900/1900 GSM/GPRS External Modem     I-87K4   Remote I-87K I/O base, 4 empty slots <	<u>l-8417</u>	ISaGRAF I-8000 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     I-7188EGD   ISaGRAF I-7188 ethernet controller with display     IVIEW-100-ISaGRAF   ISaGRAF IVIEW-100 controller     Battery backup SRAM   S256     256Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAF     S512   512Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAF     X607   128Kbytes battery backup SRAM for I-7188XG/7188EG     X608   512Kbytes battery backup SRAM for I-7188XG/7188EG     MMICON / LCD   MMICON + 240x64 Graphic LCD     M1203A   900/1800 GSM/GPRS External Modem     M1213A   900/1900 GSM/GPRS External Modem     I-87K expansion base   I-87K4     I-87K4   Remote I-87K I/O base, 4 empty slots     I-87K5   Remote I-87K I/O base, 5 empty slots	<u>l-8817</u>	ISaGRAF I-8000 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     IVIEW-100-ISaGRAF   ISaGRAF IVIEW-100 controller     Battery backup SRAM   S256     256Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAF     S512   512Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAF     X607   128Kbytes battery backup SRAM for I-7188XG/7188EG     X608   512Kbytes battery backup SRAM for I-7188XG/7188EG     MMICON / LCD   MMICON + 240x64 Graphic LCD     M1203A   900/1800 GSM/GPRS External Modem     M1213A   900/1900 GSM/GPRS External Modem     I-87K4   Remote I-87K I/O base, 4 empty slots     I-87K5   Remote I-87K I/O base, 5 empty slots	I-8437	ISaGRAF I-8000 ethernet controller, 4 empty slots
I-7188XGDISaGRAF I-7188 controller with displayI-7188EGISaGRAF I-7188 ethernet controllerI-7188EGDISaGRAF I-7188 ethernet controller with displayIVIEW-100-ISaGRAFISaGRAF IVIEW-100 controllerBattery backup SRAMS256256Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAFS512512Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAFX607128Kbytes battery backup SRAM for I-7188XG/7188EGX608512Kbytes battery backup SRAM for I-7188XG/7188EGMMICON / LCDMMICON + 240x64 Graphic LCDGSM modemM1203AM1203A900/1800 GSM/GPRS External ModemM1213A900/1900 GSM/GPRS External ModemI-87K4Remote I-87K I/O base, 4 empty slotsI-87K5Remote I-87K I/O base, 5 empty slots	I-8837	ISaGRAF I-8000 ethernet controller, 8 empty slots
I-7188EG   ISaGRAF I-7188 ethernet controller     I-7188EGD   ISaGRAF I-7188 ethernet controller with display     IVIEW-100-ISaGRAF   ISaGRAF IVIEW-100 controller     Battery backup SRAM   S256     256Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAF     S512   512Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAF     X607   128Kbytes battery backup SRAM for I-7188XG/7188EG     X608   512Kbytes battery backup SRAM for I-7188XG/7188EG     MMICON / LCD   MMICON + 240x64 Graphic LCD     GSM modem   M1203A     M1203A   900/1800 GSM/GPRS External Modem     M1213A   900/1900 GSM/GPRS External Modem     I-87K4   Remote I-87K I/O base, 4 empty slots     I-87K5   Remote I-87K I/O base, 5 empty slots	I-7188XG	ISaGRAF I-7188 controller
I-7188EGD   ISaGRAF I-7188 ethernet controller with display     IVIEW-100-ISaGRAF   ISaGRAF IVIEW-100 controller     Battery backup SRAM   S256     256Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAF     S512   512Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAF     X607   128Kbytes battery backup SRAM for I-7188XG/7188EG     X608   512Kbytes battery backup SRAM for I-7188XG/7188EG     MMICON / LCD   MMICON + 240x64 Graphic LCD     GSM modem   M1203A     M1203A   900/1800 GSM/GPRS External Modem     M1213A   900/1900 GSM/GPRS External Modem     I-87K4   Remote I-87K I/O base, 4 empty slots     I-87K5   Remote I-87K I/O base, 5 empty slots	I-7188XGD	ISaGRAF I-7188 controller with display
IVIEW-100-ISaGRAF   ISaGRAF IVIEW-100 controller     Battery backup SRAM   S256     S256   256Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAF     S512   512Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAF     X607   128Kbytes battery backup SRAM for I-7188XG/7188EG     X608   512Kbytes battery backup SRAM for I-7188XG/7188EG     MMICON / LCD   MMICON + 240x64 Graphic LCD     GSM modem   M1203A     900/1800 GSM/GPRS External Modem     M1213A   900/1900 GSM/GPRS External Modem     I-87K expansion base   I-87K I/O base, 4 empty slots     I-87K5   Remote I-87K I/O base, 5 empty slots	I-7188EG	
IVIEW-100-ISaGRAF   ISaGRAF IVIEW-100 controller     Battery backup SRAM   S256     S256   256Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAF     S512   512Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAF     X607   128Kbytes battery backup SRAM for I-7188XG/7188EG     X608   512Kbytes battery backup SRAM for I-7188XG/7188EG     MMICON / LCD   MMICON + 240x64 Graphic LCD     GSM modem   M1203A     900/1800 GSM/GPRS External Modem     M1213A   900/1900 GSM/GPRS External Modem     I-87K expansion base   I-87K I/O base, 4 empty slots     I-87K5   Remote I-87K I/O base, 5 empty slots	I-7188EGD	ISaGRAF I-7188 ethernet controller with display
Battery backup SRAM     S256   256Kbytes battery backup SRAM for I-8417 /8817/8437/8837 &     IVIEW-100-ISaGRAF     S512   512Kbytes battery backup SRAM for I-8417 /8817/8437/8837 &     IVIEW-100-ISaGRAF     X607   128Kbytes battery backup SRAM for I-7188XG/7188EG     X608   512Kbytes battery backup SRAM for I-7188XG/7188EG     MMICON / LCD   MMICON + 240x64 Graphic LCD     GSM modem	IVIEW-100-ISaGRAF	
S256256Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAFS512512Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAFX607128Kbytes battery backup SRAM for I-7188XG/7188EGX608512Kbytes battery backup SRAM for I-7188XG/7188EGMMICON / LCDMMICON + 240x64 Graphic LCDGSM modemM1203A900/1800 GSM/GPRS External ModemM1213A900/1900 GSM/GPRS External ModemI-87K expansion baseI-87K4Remote I-87K I/O base, 4 empty slotsI-87K5Remote I-87K I/O base, 5 empty slots		
IVIEW-100-ISaGRAF     S512   512Kbytes battery backup SRAM for I-8417 /8817/8437/8837 &     IVIEW-100-ISaGRAF   X607     128Kbytes battery backup SRAM for I-7188XG/7188EG     X608   512Kbytes battery backup SRAM for I-7188XG/7188EG     MMICON / LCD   MMICON + 240x64 Graphic LCD     GSM modem	Battery backup SRAM	
S512512Kbytes battery backup SRAM for I-8417 /8817/8437/8837 & IVIEW-100-ISaGRAFX607128Kbytes battery backup SRAM for I-7188XG/7188EGX608512Kbytes battery backup SRAM for I-7188XG/7188EGMMICON / LCDMMICON + 240x64 Graphic LCDGSM modem1M1203A900/1800 GSM/GPRS External ModemM1213A900/1900 GSM/GPRS External ModemI-87K expansion base1I-87K4Remote I-87K I/O base, 4 empty slotsI-87K5Remote I-87K I/O base, 5 empty slots	S256	256Kbytes battery backup SRAM for I-8417 /8817/8437/8837 &
IVIEW-100-ISaGRAF     X607   128Kbytes battery backup SRAM for I-7188XG/7188EG     X608   512Kbytes battery backup SRAM for I-7188XG/7188EG     MMICON / LCD   MMICON + 240x64 Graphic LCD     GSM modem		
X607128Kbytes battery backup SRAM for I-7188XG/7188EGX608512Kbytes battery backup SRAM for I-7188XG/7188EGMMICON / LCDMMICON + 240x64 Graphic LCDGSM modem	S512	
X608   512Kbytes battery backup SRAM for I-7188XG/7188EG     MMICON / LCD   MMICON + 240x64 Graphic LCD     GSM modem		IVIEW-100-ISaGRAF
MMICON / LCD   MMICON + 240x64 Graphic LCD     GSM modem	X607	128Kbytes battery backup SRAM for I-7188XG/7188EG
GSM modem     M1203A   900/1800 GSM/GPRS External Modem     M1213A   900/1900 GSM/GPRS External Modem     I-87K expansion base   Illight and the state of the	X608	512Kbytes battery backup SRAM for I-7188XG/7188EG
GSM modem     M1203A   900/1800 GSM/GPRS External Modem     M1213A   900/1900 GSM/GPRS External Modem     I-87K expansion base   Illight and the state of the		
M1203A   900/1800 GSM/GPRS External Modem     M1213A   900/1900 GSM/GPRS External Modem     I-87K expansion base   Image: Comparison base     I-87K4   Remote I-87K I/O base, 4 empty slots     I-87K5   Remote I-87K I/O base, 5 empty slots	MMICON / LCD	MMICON + 240x64 Graphic LCD
M1203A   900/1800 GSM/GPRS External Modem     M1213A   900/1900 GSM/GPRS External Modem     I-87K expansion base   Image: Comparison base     I-87K4   Remote I-87K I/O base, 4 empty slots     I-87K5   Remote I-87K I/O base, 5 empty slots		
M1213A   900/1900 GSM/GPRS External Modem     I-87K expansion base   I-87K4     I-87K4   Remote I-87K I/O base, 4 empty slots     I-87K5   Remote I-87K I/O base, 5 empty slots		
I-87K expansion baseI-87K4Remote I-87K I/O base, 4 empty slotsI-87K5Remote I-87K I/O base, 5 empty slots	M1203A	
I-87K4Remote I-87K I/O base, 4 empty slotsI-87K5Remote I-87K I/O base, 5 empty slots	M1213A	900/1900 GSM/GPRS External Modem
I-87K4Remote I-87K I/O base, 4 empty slotsI-87K5Remote I-87K I/O base, 5 empty slots		
I-87K5 Remote I-87K I/O base, 5 empty slots		
I-87K8 Remote I-87K I/O base. 8 empty slots	<u>I-87K5</u>	Remote I-87K I/O base, 5 empty slots
	<u>I-87K8</u>	Remote I-87K I/O base, 8 empty slots
I-87K9 Remote I-87K I/O base, 9 empty slots	<u>I-87K9</u>	Remote I-87K I/O base, 9 empty slots
Motion control board	Motion control board	
I-8091 2-axes stepping/servo motor control card	I-8091	2-axes stepping/servo motor control card
I-8090 3-axes encoder card	I-8090	3-axes encoder card

Timer/Counter board	
1-8080	4-ch. counter/frequency, 32 bit
1-87082	2 channel counter/Frequency, 32 bit
101002	
Multi-serial board	
I-8112	2 port RS232
I-8114	4 port RS232
I-8142	2 port RS485/422
I-8144	4 port RS485/422
<u></u>	
Parallel analog I/O board	
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
Parallel digital I/O board	
1-8037	16-ch. isolated open-drain output
1-8040	32-ch. isolated digital input
I-8041	32-ch. isolated digital output
1-8042	Isolated digital 16-ch. input & 16-ch. output
I-8051	16-ch. non-isolated digital input
1-8052	8-ch. isolated digital input (differential)
1-8053	16-ch. isolated digital input (single ended)
1-8054	Isolated digital 8-ch. input & 8-ch. output
1-8055	Non-isolated digital 8ch. input & 8ch. output
1-8056	16-ch. non-isolated O.C. output
1-8057	16-ch. isolated O.C. output
1-8058	8-ch. isolated digital input, AC/DC
1-8060	6-ch. relay output
1-8063	Isloated digital 4-ch. input & 4-ch. relay
1-8064	8-ch. power relay output
1-8065	8-ch. SSR-AC output
1-8066	8-ch. SSR-DC output
1-8068	8-ch. relay output
1-8069	8-ch. Photo Mos relay output
1-8077	8-ch. digital input & 8-ch. output simulator
Serial analog I/O board	
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

Serial digital I/O board	
I-87051	16-ch. non-isolated digital input
1-87052	8-ch. isolated digital input (differential)
1-87053	16-ch. isolated digital input (single ended)
1-87054	Isolated digital 8-ch. input & 8-ch. output
I-87055	Non-isolated digital 8ch. input & 8ch. output
1-87057	16-ch. isolated O.C. output
1-87058	8-ch. isolated digital input, AC/DC
1-87063	Isloated digital 4-ch. input & 4-ch. relay
1-87064	8-ch. power relay output
1-87065	8-ch. SSR-AC output
1-87066	8-ch. SSR-DC output
1-87068	8-ch. relay output
Conveter & Repeater	
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
<u>I-7520</u>	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-7061	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
RS485 Hub	3-way isolated RS485 to 3 ports RS485 hub
	3-way isolated RS485 to 3 ports RS485 hub
Man Machine Interface	
Man Machine Interface Touch506S	5.7" Color STN Panel display with touch
Man Machine Interface Touch506S Touch510S	5.7" Color STN Panel display with touch 10.4" Color STN Panel Display With Touch
Man Machine Interface Touch506S	5.7" Color STN Panel display with touch
Man Machine Interface Touch506S Touch510S Touch510T	5.7" Color STN Panel display with touch 10.4" Color STN Panel Display With Touch
Man Machine Interface Touch506S Touch510S	5.7" Color STN Panel display with touch 10.4" Color STN Panel Display With Touch 10.4" Color TFT Panel Display With Touch
Man Machine Interface Touch506S Touch510S Touch510T I-7000 analog I/O module I-7011	5.7" Color STN Panel display with touch 10.4" Color STN Panel Display With Touch 10.4" Color TFT Panel Display With Touch 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O
Man Machine Interface Touch506S Touch510S Touch510T I-7000 analog I/O module	5.7" Color STN Panel display with touch 10.4" Color STN Panel Display With Touch 10.4" Color TFT Panel Display With Touch 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011 with display
Man Machine Interface Touch506S Touch510S Touch510T I-7000 analog I/O module I-7011 I-7011D I-7011P	5.7" Color STN Panel display with touch 10.4" Color STN Panel Display With Touch 10.4" Color TFT Panel Display With Touch 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011 with display 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O
Man Machine Interface Touch506S Touch510S Touch510T I-7000 analog I/O module I-7011 I-7011D I-7011P I-7011PD	5.7" Color STN Panel display with touch 10.4" Color STN Panel Display With Touch 10.4" Color TFT Panel Display With Touch 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011 with display 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011P with display
Man Machine InterfaceTouch506STouch510STouch510TI-7000 analog I/O moduleI-7011I-7011DI-7011PI-7011PDI-7012	5.7" Color STN Panel display with touch 10.4" Color STN Panel Display With Touch 10.4" Color TFT Panel Display With Touch 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011 with display 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011P with display 1-ch. analog input (16-bit), 1-ch. D/I & 2-ch. D/O
Man Machine Interface       Touch506S       Touch510S       Touch510T       I-7000 analog I/O module       I-7011       I-7011D       I-7011P       I-7012       I-7012D	5.7" Color STN Panel display with touch 10.4" Color STN Panel Display With Touch 10.4" Color TFT Panel Display With Touch 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011 with display 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011P with display 1-ch. analog input (16-bit), 1-ch. D/I & 2-ch. D/O I-7012D with display
Man Machine Interface       Touch506S       Touch510S       Touch510T       I-7000 analog I/O module       I-7011       I-7011D       I-7011P       I-7012       I-7012D       I-7012F	5.7" Color STN Panel display with touch 10.4" Color STN Panel Display With Touch 10.4" Color TFT Panel Display With Touch 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011 with display 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011P with display 1-ch. analog input (16-bit), 1-ch. D/I & 2-ch. D/O I-7012D with display Fast mode I-7012 (12-bit), normal 16-bit
Man Machine Interface       Touch506S       Touch510S       Touch510T       I-7000 analog I/O module       I-7011       I-7011D       I-7011P       I-7012       I-7012F       I-7012FD	5.7" Color STN Panel display with touch 10.4" Color STN Panel Display With Touch 10.4" Color TFT Panel Display With Touch 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011 with display 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011P with display 1-ch. analog input (16-bit), 1-ch. D/I & 2-ch. D/O I-7012D with display Fast mode I-7012 (12-bit), normal 16-bit I-7012F with display
Man Machine Interface       Touch506S       Touch510S       Touch510T       I-7000 analog I/O module       I-7011       I-7011D       I-7011P       I-7012       I-7012D       I-7012F       I-7013	5.7" Color STN Panel display with touch 10.4" Color STN Panel Display With Touch 10.4" Color TFT Panel Display With Touch 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011 with display 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011P with display 1-ch. analog input (16-bit), 1-ch. D/I & 2-ch. D/O I-7012D with display Fast mode I-7012 (12-bit), normal 16-bit I-7012F with display 1-ch. RTD input (16-bit)
Man Machine Interface       Touch506S       Touch510S       Touch510T       I-7000 analog I/O module       I-7011       I-7011D       I-7011P       I-7012       I-7012D       I-7012F       I-7013	5.7" Color STN Panel display with touch 10.4" Color STN Panel Display With Touch 10.4" Color TFT Panel Display With Touch 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011 with display 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011P with display 1-ch. analog input (16-bit), 1-ch. D/I & 2-ch. D/O I-7012D with display Fast mode I-7012 (12-bit), normal 16-bit I-7012F with display 1-ch. RTD input (16-bit) I-7013 with display
Man Machine Interface       Touch506S       Touch510S       Touch510T       I-7000 analog I/O module       I-7011       I-7011D       I-7011P       I-7012       I-7012D       I-7012F       I-7013D       I-7033	5.7" Color STN Panel display with touch 10.4" Color STN Panel Display With Touch 10.4" Color TFT Panel Display With Touch 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011 with display 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011P with display 1-ch. analog input (16-bit), 1-ch. D/I & 2-ch. D/O I-7012D with display Fast mode I-7012 (12-bit), normal 16-bit I-7012F with display 1-ch. RTD input (16-bit) I-7013 with display 3-ch. RTD input (16-bit)
Man Machine Interface       Touch506S       Touch510S       Touch510T       I-7000 analog I/O module       I-7011       I-7011D       I-7011P       I-7012       I-7012D       I-7012F       I-7013D       I-7033D	5.7" Color STN Panel display with touch 10.4" Color STN Panel Display With Touch 10.4" Color TFT Panel Display With Touch 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011 with display 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011P with display 1-ch. analog input (16-bit), 1-ch. D/I & 2-ch. D/O I-7012D with display Fast mode I-7012 (12-bit), normal 16-bit I-7012F with display 1-ch. RTD input (16-bit) I-7013 with display 3-ch. RTD input (16-bit) I-7033 with display
Man Machine Interface       Touch506S       Touch510S       Touch510T       I-7000 analog I/O module       I-7011       I-7011D       I-7011P       I-7012       I-7012D       I-7012F       I-7013D       I-7033	5.7" Color STN Panel display with touch 10.4" Color STN Panel Display With Touch 10.4" Color TFT Panel Display With Touch 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011 with display 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011P with display 1-ch. analog input (16-bit), 1-ch. D/I & 2-ch. D/O I-7012D with display Fast mode I-7012 (12-bit), normal 16-bit I-7012F with display 1-ch. RTD input (16-bit) I-7013 with display 3-ch. RTD input (16-bit)
Man Machine Interface       Touch506S       Touch510S       Touch510T       I-7000 analog I/O module       I-7011       I-7011D       I-7011P       I-7012       I-7012D       I-7012F       I-7013D       I-7033D	5.7" Color STN Panel display with touch 10.4" Color STN Panel Display With Touch 10.4" Color TFT Panel Display With Touch 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011 with display 1-ch. thermo-couple input (16-bit), 1-ch. D/I & 2-ch. D/O I-7011P with display 1-ch. analog input (16-bit), 1-ch. D/I & 2-ch. D/O I-7012D with display Fast mode I-7012 (12-bit), normal 16-bit I-7012F with display 1-ch. RTD input (16-bit) I-7013 with display 3-ch. RTD input (16-bit) I-7033 with display 1-ch. analog/transmitter input (16-bit) with display, 1-ch. D/I & 2-

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)
1-7022	2-ch. analog output (12-bit), each ch. can be different output type
	(V,mA) & range
I-7024	4-ch. analog output (14-bit)
I-7000 digital I/O module	
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
1-7066	7-ch. Photo Mos relay output
I-7066D	I-7066 with LED display
1-7067	7-ch. relay output
I-7067D	I-7067 with LED display
	+

I-7000 counter module	
1-7080	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/l, 6-ch. D/O
X304	3-ch. A/D (+/-5V), 1-ch. D/A (+/-5V),
	4-ch. D/l, 4-ch. D/O
X305	7-ch. A/D (+/-5V), 1-ch. D/A (+/-5V),
	2-ch. D/l, 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	1-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)