
: iP-84178817/8447/8847

iP-8xx7 iP- iP-8417, iP8817, iP-8447, iP884 iP-8x47 PAC

2008

iPAC-8000 : iP-84178817/8447/8847 ISaGRAF

ISaGRAF

IEC 61133: ISaGRAF

ISaGRAF PAC :

PAC PAG7186EG PAG7186PEG-7188EG-7188XG,
PAC5007/5107/5207/5307

iPAC: iP-8447, iP8447, iP84370, iP88370, iP8417, iP8817,

WinPAC: WP-8147, WP8447, WP8847 (WinCon: WP847, WP8747)

ViewPAC: VP-25W7, VP-23W7, VP-2117

XPAC: XP-8047CE6, XP8347CE6, XP-8747CE6

E-mail service@icpdas.com

www.icpdas.com

www.icpdas.com on FAQ` Software` ISaGRAF

Chun Tsai, Spike Huang Janice Hong

2008

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ISaGRAF :

<http://www.icpdas.com/products/8000/isagraf.htm>
www.icpdas.com Products > Software > ISaGRAF

ISaGRAF () :

CD-ROM: \napdos\isagraf\8000\english_man\user_manual_i_8xx7.pdf"
http://www.icpdas.com/products/8000/getting_started_manual.htm

ISaGRAF () :

CD-ROM: \napdos\isagraf\8000\chinese_man\chinese_user_manual_i_8xx7.pdf"
http://www.icpdas.com/products/8000/getting_started_manual.htm

:

CD-ROM: \NAPDOS\8000\8000manual.pdf
<http://ftp.icpdas.com.tw/pub/cd/8000cd/napdos/8000/>

:

ISaGRAF/D libraries, drivers
<http://www.icpdas.com/products/PA8000/isagraf.htm>

' : NS-207/NS-208
[http://www.icpdas.com/products/Industrial Ethernet Switch/Managed Industrial Ethernet Switch](http://www.icpdas.com/products/Industrial%20Ethernet%20Switch/Managed%20Industrial%20Ethernet%20Switch)



' RS-232 RS-422/485 : I-7520R
[http://www.icpdas.com/products/Industrial Communication Converter & Repeater](http://www.icpdas.com/products/Industrial%20Communication/Converter%20&%20Repeater)



' : DP-665/660, 452F
[http://www.icpdas.com/products > Accessories > Power Supply](http://www.icpdas.com/products/Accessories/Power%20Supply)



' I-8K/87K I/O
http://www.icpdas.com/products/8000/io_support_list.htm



FAQ:

www.icpdas.com FAQ > Software ISaGRAF
<http://www.icpdas.com/faq/isagraf/FAQ>

ISaGRAF

ISaGRAF

1. www.icpdas.com/home.htm

2. ISaGRAF

3.

4. ()

: iP-8417/8447/8817/8847

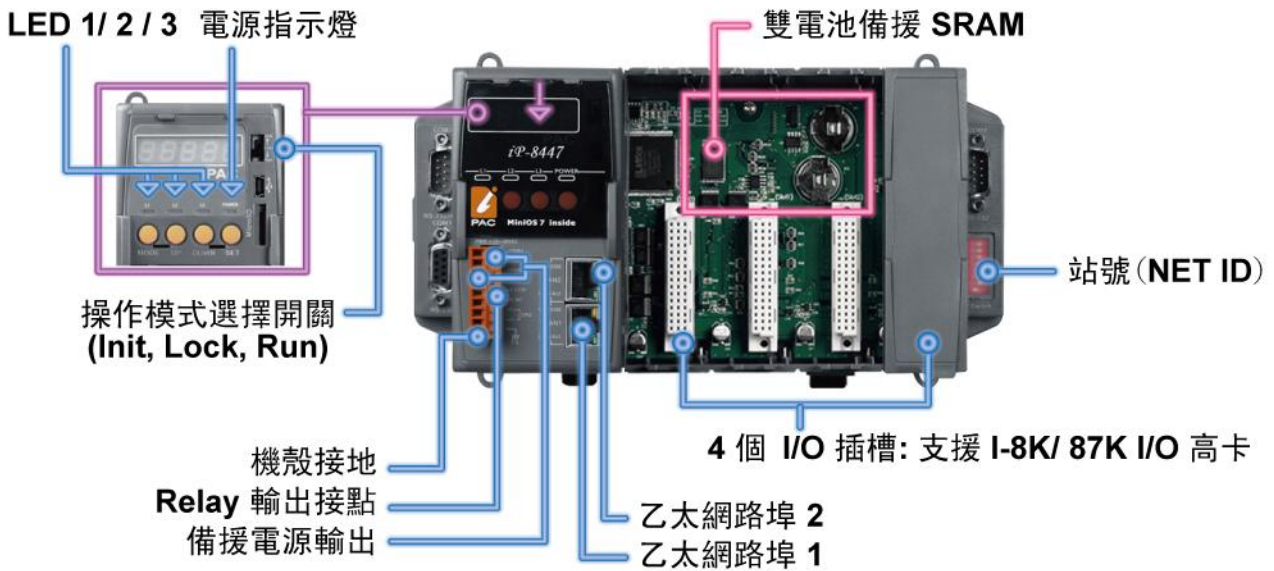
		iP - 8417	iP - 8817	iP - 8447	iP - 8847
		MiniOS7 (DOS -like)			
ISaGRAF	ISaGRAF Version 3	IEC 61131 -3			
		LD, ST, FBD, SFC, IL, FC			
		64 KB			
		: 2 ~ 25 ms : 10 ~ 125 ms ()			
CPU					
(CPU)	80186, 80 MHz				
SRAM	512 KB	768 KB			
Flash	512 KB;				
microSD	(ISaGRAF)				
SRAM	512 KB;	5 . ()			
EEPROM	16 KB				
NVRAM	31 bytes (, 5)				
(RTC)	/ ,				
64-bit	,				
	(0.8)				
(DIP switch)	(8 bits)				
Ethernet	-	RJ-45 x 2, 10/100 Base -TX (Auto -negotiating, Auto MDI/MDI -X, LED indicators)			
COM 0	1-87K				
COM 1	RS -232 (RxD, TxD, GND) ();				
COM 2	RS -485 (Data+, Data -) self -tuner ; 3000 V DC				
COM 3	RS -232/RS -485 (RS -232: RxD, TxD, CTS, RTS, GND; RS -485: Data+, Data -);				
COM 4	RS -232 (RxD, TxD, CTS, RTS, DSR, DTR, CD, RI, GND);				
SMMI					
LED	,				
LED	3				
	4				
	-	-			

	iP -8417	iP -8817	iP -8447	iP -8847
I/O				
	4	8	4	8
	: I-8K I-87K			
	8/16 bits			
	2 K			
(W x L x H)	231 mm x 132 mm x 111 mm: iP -8417, iP -8447 355 mm x 132 mm x 111 mm: iP -8817, iP -8847			
	(DIN -Rail)		(Wall Mounting)	
	-25 ~ +75°C			
	-30 ~ +80°C			
	10 ~ 90% RH ()			
	+10 ~ +30 V _{DC}			
	1 kV			
	; (1 A @ 24 V _{DC})			
	30 W	30 W	30 W	30 W
	6.7 W	7.2 W	6.7 W	7.2 W
()				
(Net ID)	8 bits	(DIP switch)	(NET ID)	1 ~ 255
Modbus RTU/ASCII Master	2 128	: COM1 ~ 5 (*) Modbus_XXX		Modbus
Modbus RTU Slave	2	: COM1 (COM2, COM3)		ISaGRAF, PC/ / OPC Server
Modbus TCP/IP Slave	2	Modbus TCP/IP Slave (6) (iP-8x47)		ISaGRAF PC/
				COM1 ~ COM20 (*)
I/O	COM2, COM3, COM4 I-87K I/O) I/O	1 (I-87Kn)	I-7000 + I-87K I/O 64	I/O RU -87Pn + I -87K I/O I/O
Fbus	COM3,	ICP DAS	ISaGRAF	
Ebus	LAN2	ICP DAS) (ISaGRAF iP-8x47)	(
SMS:	COM4 COM5 (*)	GSM Modem		
	GSM Modem : GTM -201 -RS232 (850/900/1800/1900 GSM/GPRS Modem) GSM/GPRS Modem : http://www.icpdas.com/products/GSM_GPRS/wireless/GSM_GPRS_modem.htm			
(Modem Link)	COM4	Modem,	PC	

MMICON/LCD	COM3 COM4 1 ICP DAS MMICON. 1 240 x 64 LCD 1 4 x 4	
() (Bus7000)	2 I-7000 I-87K I/O 1 I/O. I/O.	
CAN/CANopen	COM1, 3, 4 COM5 ~ 12 (*) I-7530 (RS -232 CAN) CAN CANopen (sensor). iP-8xx7 3 RS -232 3 I-7530. (FAQ -086)	
FRnet I/O	4 I-8172W FRnet Master FRnet I/O (1024 -ch. DI + 1024 -ch. DO)	
Email	Ethernet Port Email, mail 10 488 KB. (iP-8x47)	
FTP Client	FTP Client, PAC FTP Server. (FAQ -151)	
I/O (ISaGRAF PAC I/O I/O)		
PWM	PWM	I-8088W: 8-ch. PWM 1 Hz ~ 100 KHz (), : 0.1 ~ 99.9%
	PWM (DO)	8 500 Hz. Off=1, On=1 ms. : Off: 1 ~ 32767 ms, On: 1 ~ 32767 ms, : I -8037W, 8041W, 8041AW, 8042W, 8050W, 8054W, 8055W, 8056W, 8057W, 8060W, 8063W, 8064W, 8068W, 8069W. (Relay DO Relay,)
Encoder,	(Parallel) DI	8 : 32 -bit. 500 Hz. ON OFF > 1 ms. : I -8040W, 8040PW, 8042W, 8046W, 8050W, 8051W, 8052W, 8053W, 8053PW, 8054W, 8055W, 8058W, 8063W.
	(Serial) DI	100 Hz. : 0 ~ 65535 (16 -bit). : I -87040W, 87046W, 87051W, 87052W, 87053W, 87 053W -A5, 87054W, 87055W, 87058W, 87059W, 87063W.
	DI	I-7000 I-87K DI 100 Hz. : 0 ~ 65535 .
		I-87082W: 100 kHz, 32 bit; I-8084W: 250 kHz, 32 bit;
	Encoder	I-8093W: 3 Encoder , Quadrant 1 MHz Pulse/Direction CW/CCW 4 MHz . (FAQ -112) I-8084W: 250 kHz 4-ch Encoder, pulse/direction Up/Down A/B phase (Quad. mode), Encoder Z -index. (FAQ -100)
		I-87082W: 2 -ch, 1 Hz ~ 100 kHz; I-87088W: 8 -ch, 1 Hz ~ 100 kHz; I-8084W: 8 -ch, 1 Hz ~ 250 kHz;
(Motion)	1 I-8091W (2) 2 I-8091W (4) Ethernet	
* : COM5 ~ COM20 iP-8xx7 0 ~ 7 COM		
* ISaGRAF FAQ: http://www.icpdas.com/fag/isagraf_c.htm		
* NS -205/NS -208		

1.1 iPAC-8x47 I-8x37-80

iP-8447/8847 I-8xx7ISaGRAF iPAC



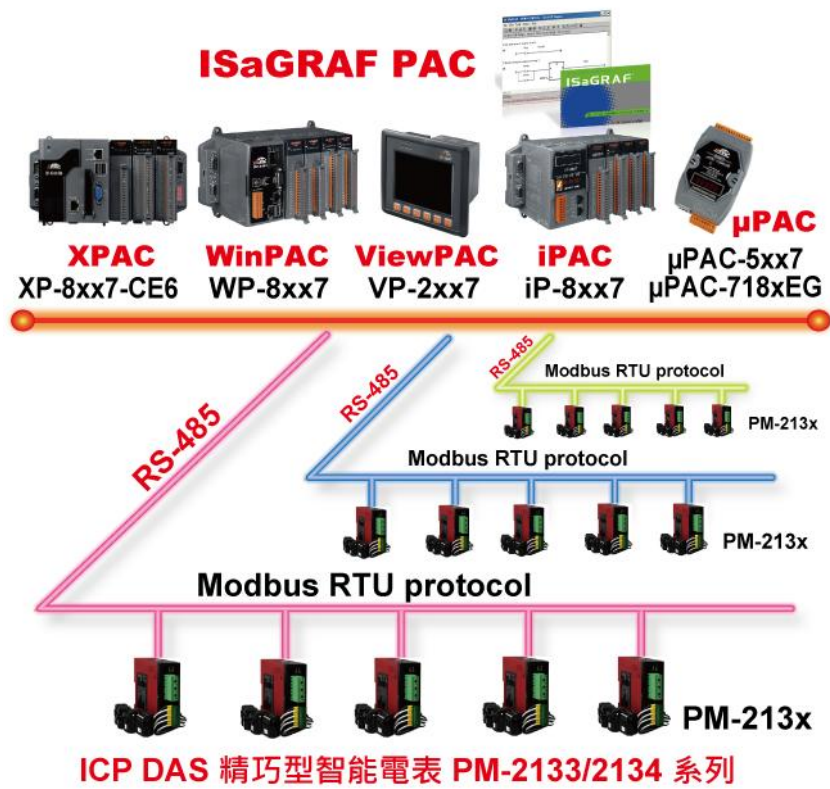
	iP-8x47	I-8x3780
EEPROM	16KB	2KB
SRAM	768KB	512KB
SRAM	512KB, 2	S256512
COM2 (RS485)		
Ethernet	10/100Mbps x 2	10Mbps x 1
Modbus TCP/IP	2 6	4
(HotSwap)		
CAN/CANopen		
E-mail		
FRnet I/O		
Mbus24r Mbus24r,1 24 word		

: iPAC8x47 0~7 I-8K I-87K _____ I-87K

- ' ISaGRAF PAC Modbus RS485
- PM-213x
- '
- ' PM-213x Wh pulse
- ' PM-213x (CT)
- ' PM-213x ()

ISaGRAF PAC

[www.icpdas.com/FAQ > Software > ISaGRAF Ver.3 \(Chinese\) 29](http://www.icpdas.com/FAQ%20>%20Software%20>%20ISaGRAF%20Ver.3%20(Chinese)29)



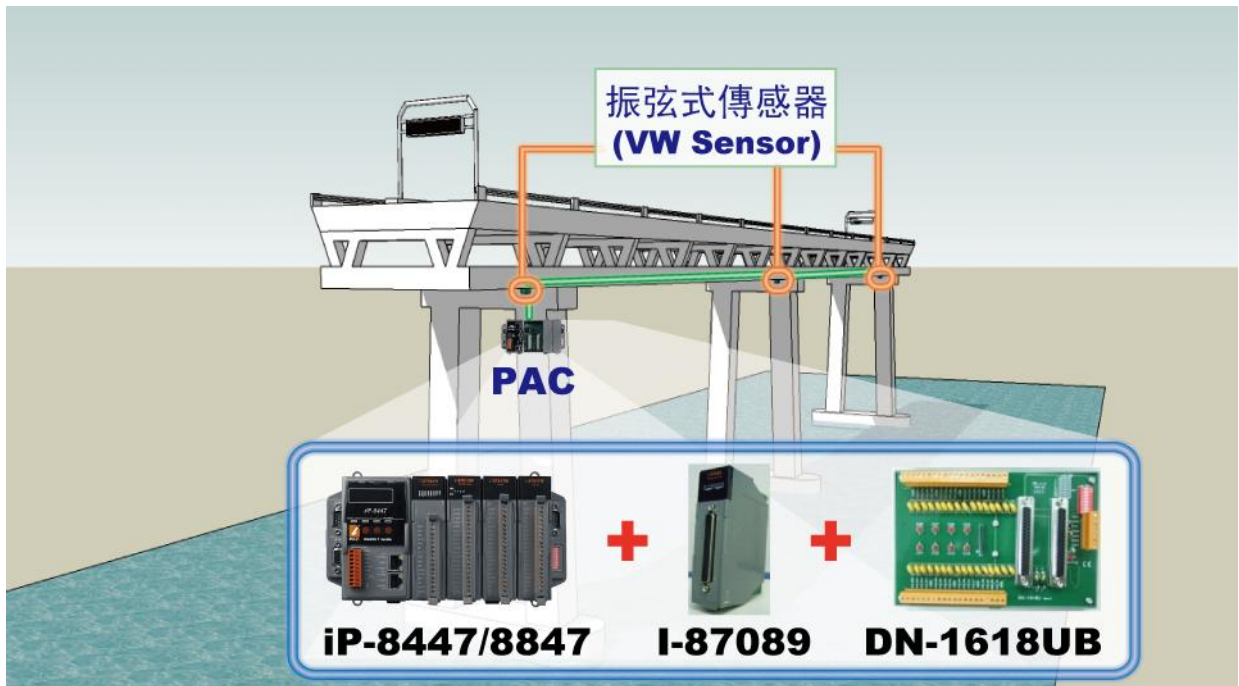
1.3

(VW Sensor :)

(ICP DAS) (VW sensor) (Carlson Strain Gauge Inputs)

iP-8x7 I-87089 () DN-1618UB () (VW sensor)

www.icpdas.com > FAQ > Software > ISaGRAF (CMnes) FAQ091



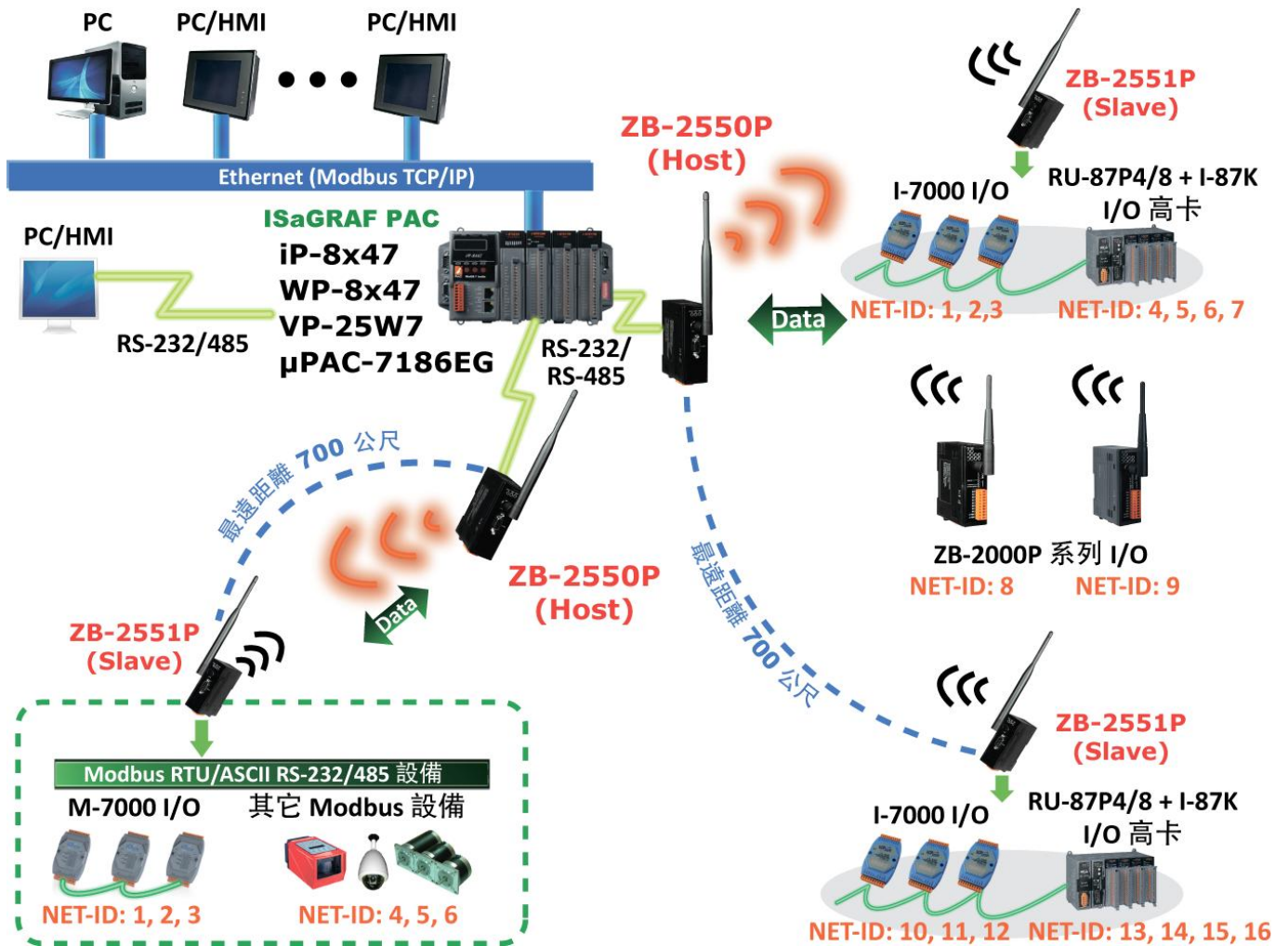
1.4 ZigBee

iP-8x7 ZB-2550P ZB-2551P 2 RS-232/485
I/O

www.icpdas.com > FAQ > Software & Drivers > ISaGRAF Ver.3 (Chinese) > FAQ110

無線傳輸方案

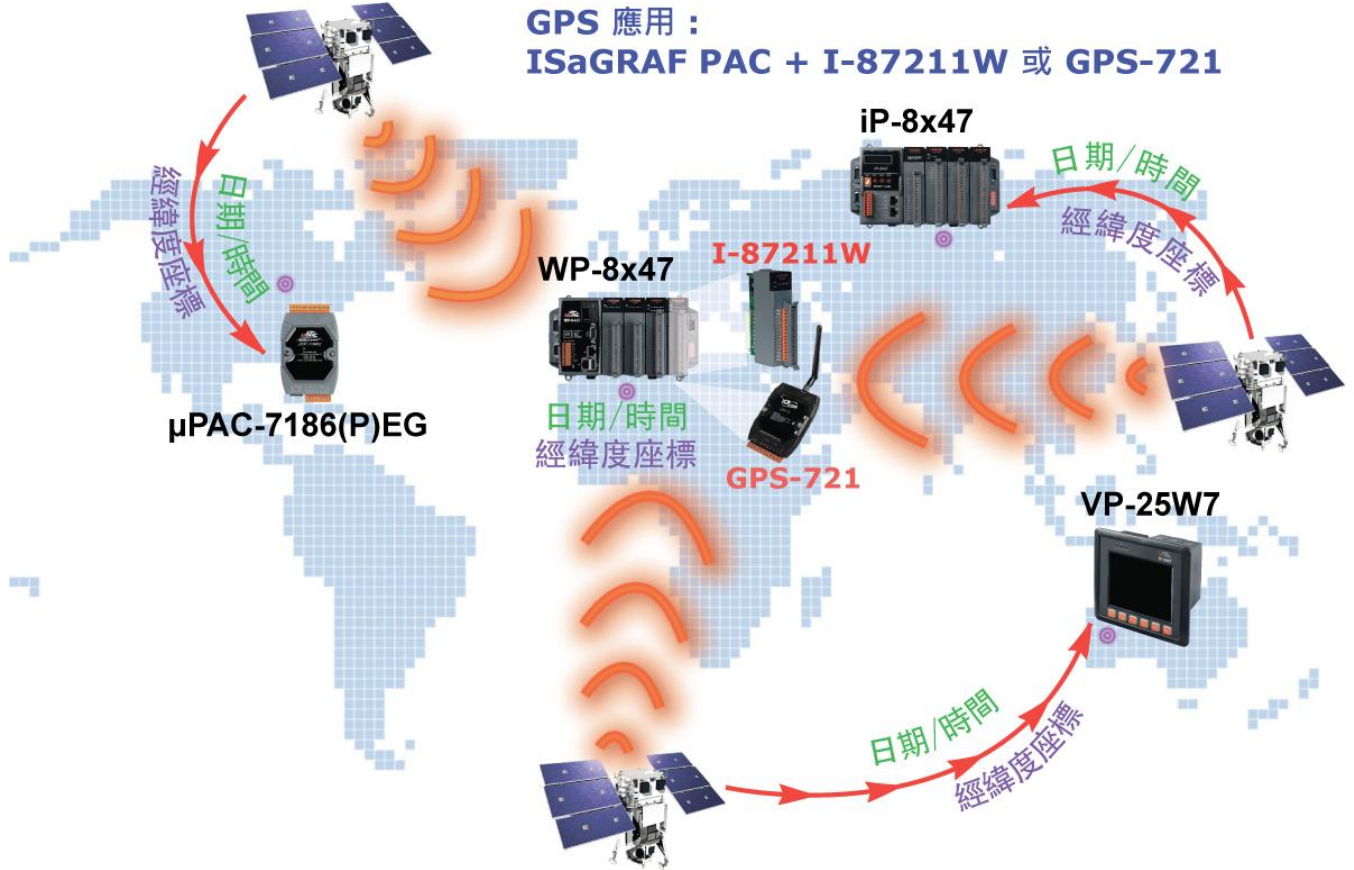
ISaGRAF PAC 搭配 ZigBee RS-232/485 轉換器來連接 I-7000/I-87K I/O 模塊與 ZB-2000P 系列 I/O 模塊或其它 Modbus RTU/ASCII 設備



1.5 GPS : ISaGRAF PAC I-87211W GPS721

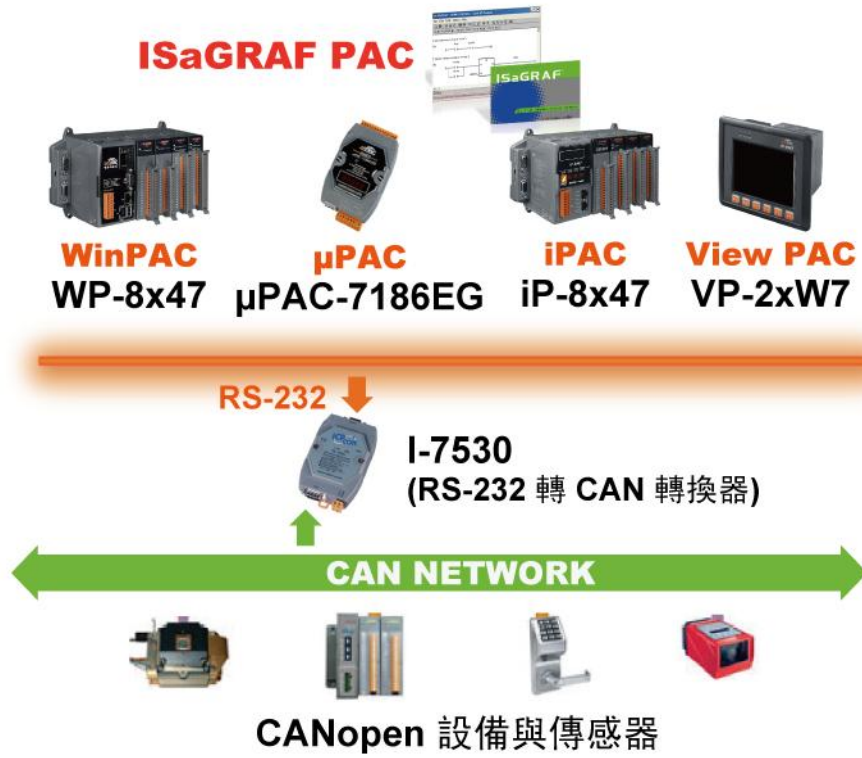
iP-8x7 I-87211W GPS721 GPS I/O
 (PAC RS485/232 GPS721 I-87211W PAC I/O)

www.icpdas.com > FAQ > Software > ISaGRAF Ver.3 > (FAQ107)



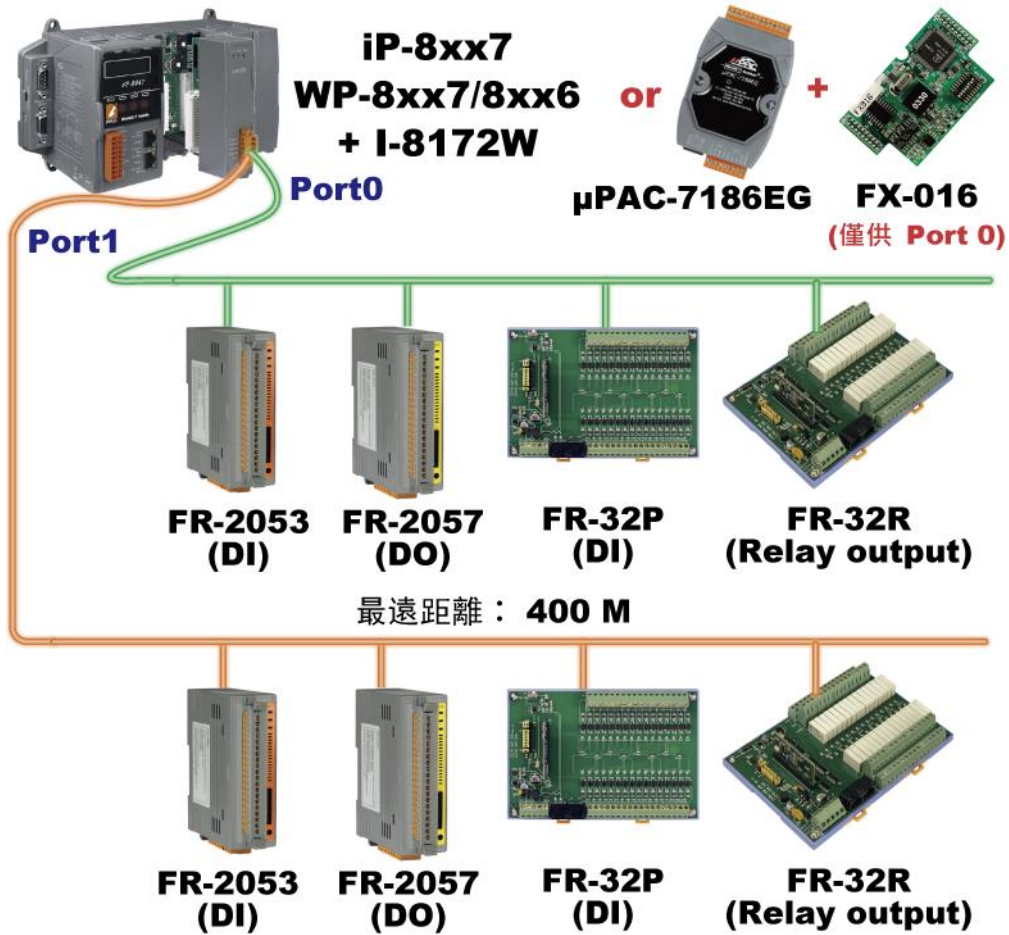
1.6 CAN/CANopen

- ' iP-8x7 3 I-7530 (RS232 CAN)
- ' www.icpdas.com > FA Software > ISaGRAF Ver.3 (Chinese) > FAQ086



1.8 FRnet I/O

I/O : 3 ms/scan (PLC)
 (: ISaGRAF PLC 9 ms 9 ms 3 ms)
www.icpdas.com > Software > ISaGRAF Ver.3 (Chinese) > FAQ082



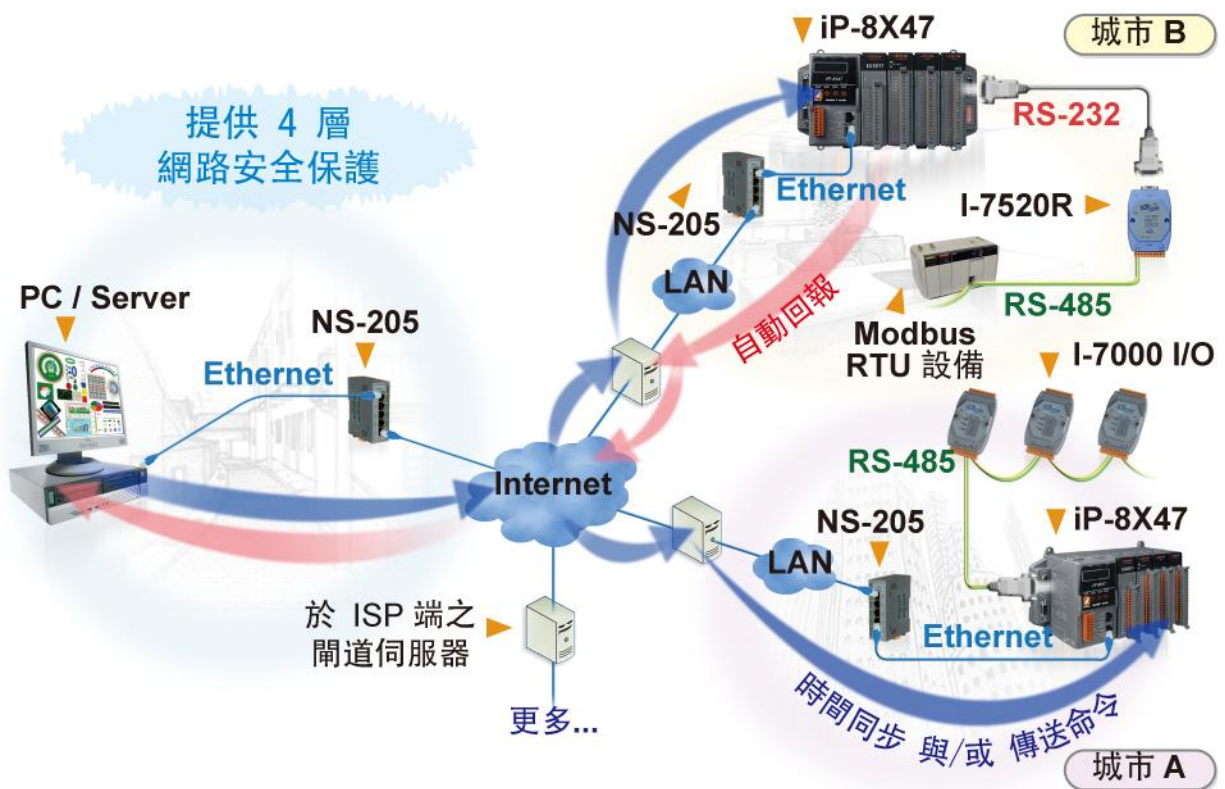
- ' VC++ 6.0 VB 6.0 ISaGRAF
- ' ISaGRAF UDP/IP PC/Server PC/Server

: Internet IP

- ' www.icpdas.com > FAQ > Software > ISaGRAF Ver.3 > (FAQ065)

: iP-8x17

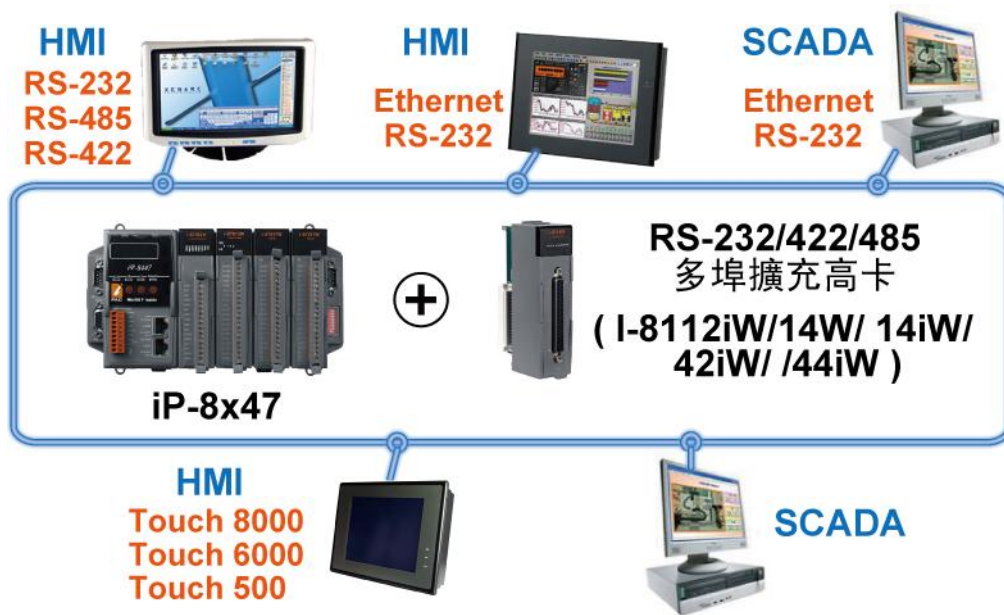
穩定且具成本效益的主動資料採集與回報系統



1.10 Modbus RTU/TCP Slave

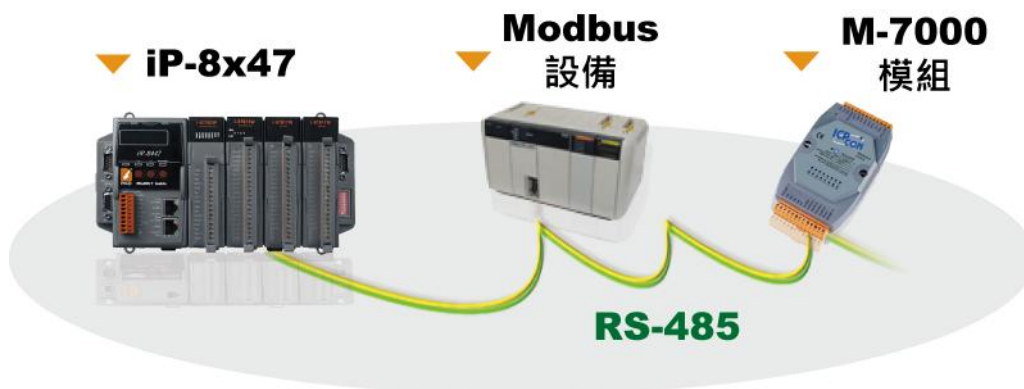
- ' Modbus RTU Slave (RS232/485) 2 (Port)
- ' Modbus TCP/IP Slave 6 (Port)

: iP-8x17 Modbus TCP Slave



1.11 Modbus RTU/ASCII Master

- ' Modbus RTU/ASCII Master (RS232/485) 2
> COM1~COM4 COM5(*)
- ' iP-8x7 Modbus PLC M-7000 I/O Modbus
()

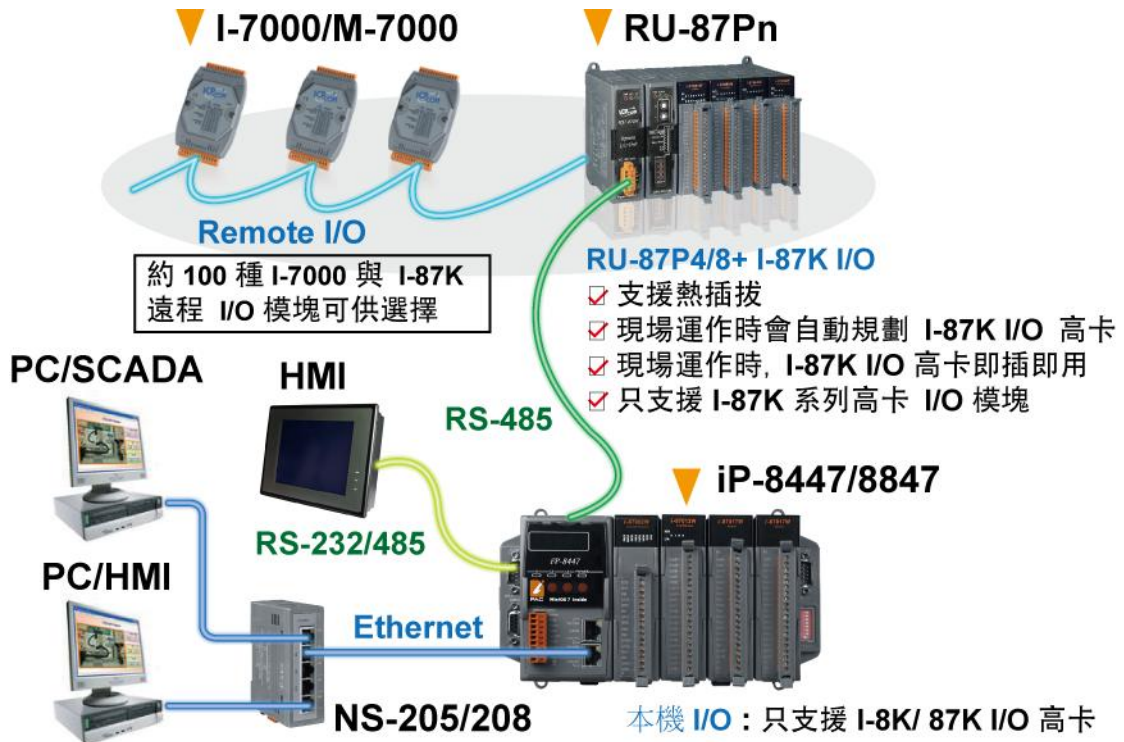


(*):

I-8112iW/14W/14iW/42iW/44iW COM5~ COM0 !

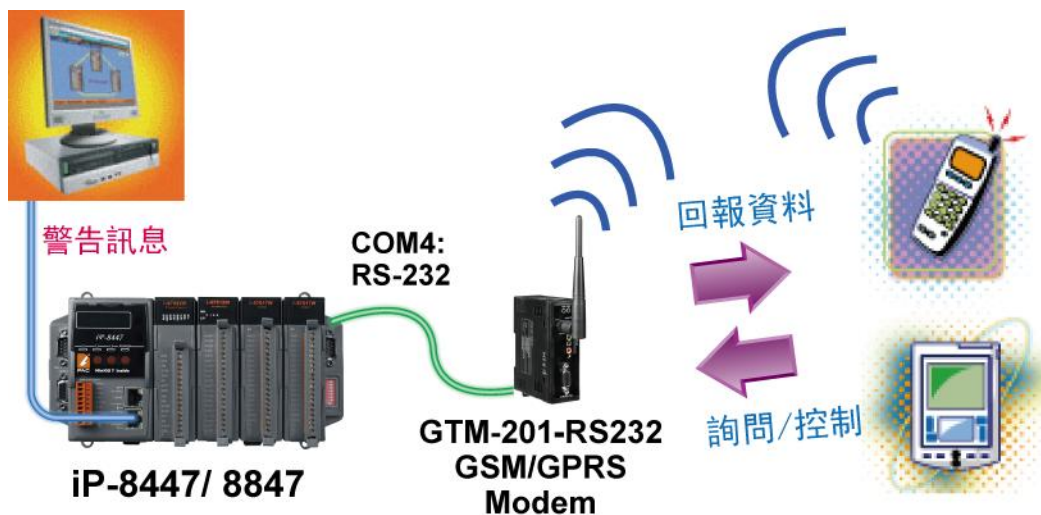
http://www.icpdas.com/products/8000/8000_IO_modules.htm

	RS-485	I/O	(I-7000/M-7000)	I/O	(RU-87Pn I-87Kn)
	I-87K	I/O			
	Modbus TCP/IP		1	iP-8x47	6 PC



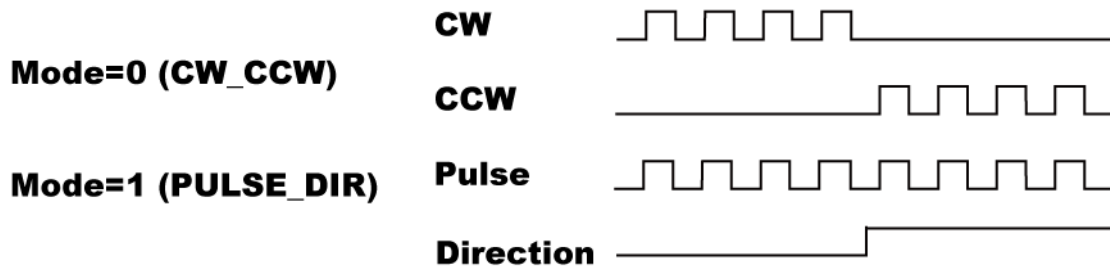
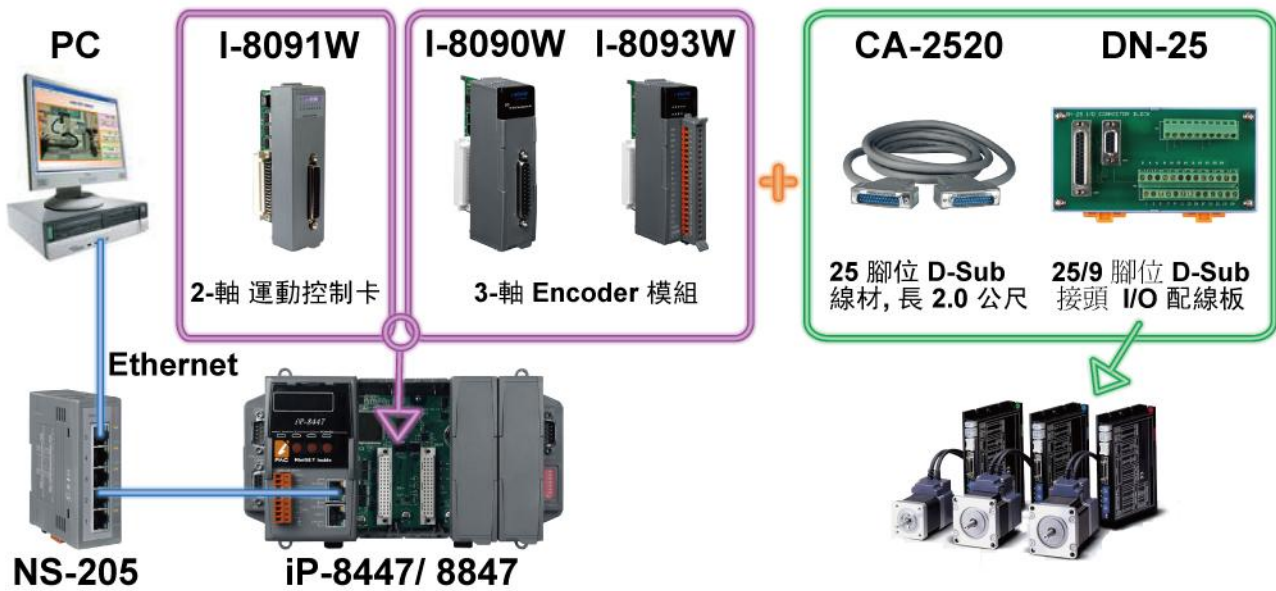
1.13 SMS :

iP-8x7	GSM Modem	SMS:	ISaGRAF
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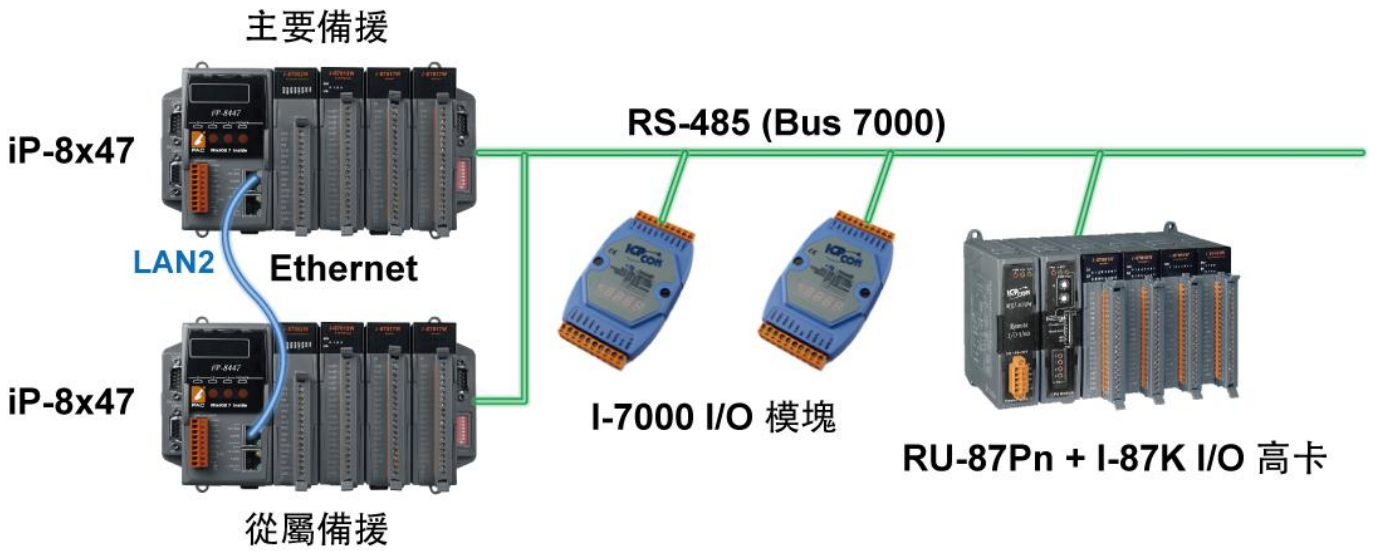


1.14

- ' 1 I-8091W 2 :X-Y 2
- ' 2 I-8091W 4 :X-Y + 2 4
- ' Encoder -I-8093W :-axis [FAQ-112](#) ; I8084W :-axis Z-index [FAQ-100](#) ;
I-8090W: -3axis



iP-8447/8847



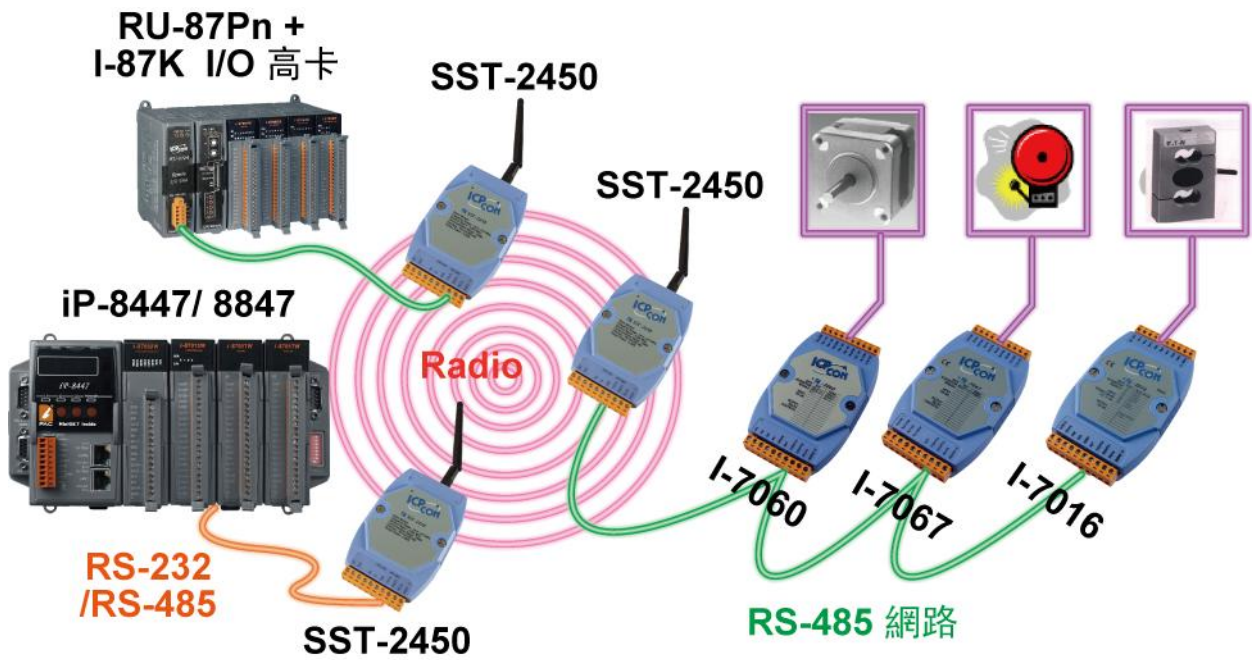
: iP-8x17

iP-8x7

2

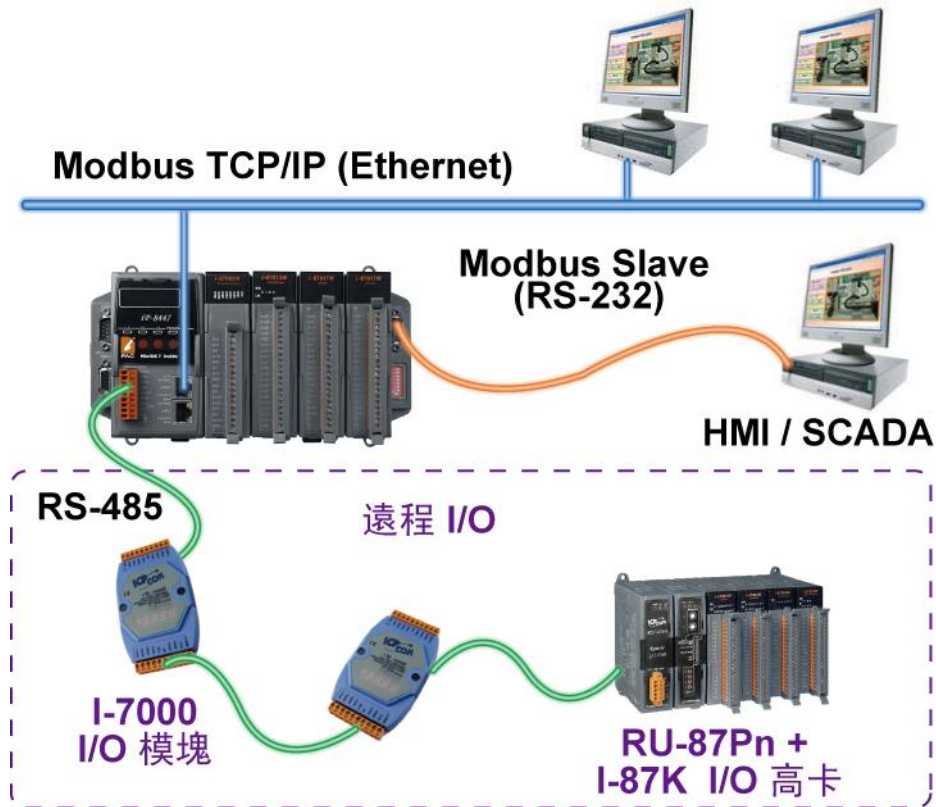
SST2450

I/O



1.18 I-7000 I-87K I/O Modbus

iP-8447/8847 I/O Modbus RTU Modbus TCP/IP

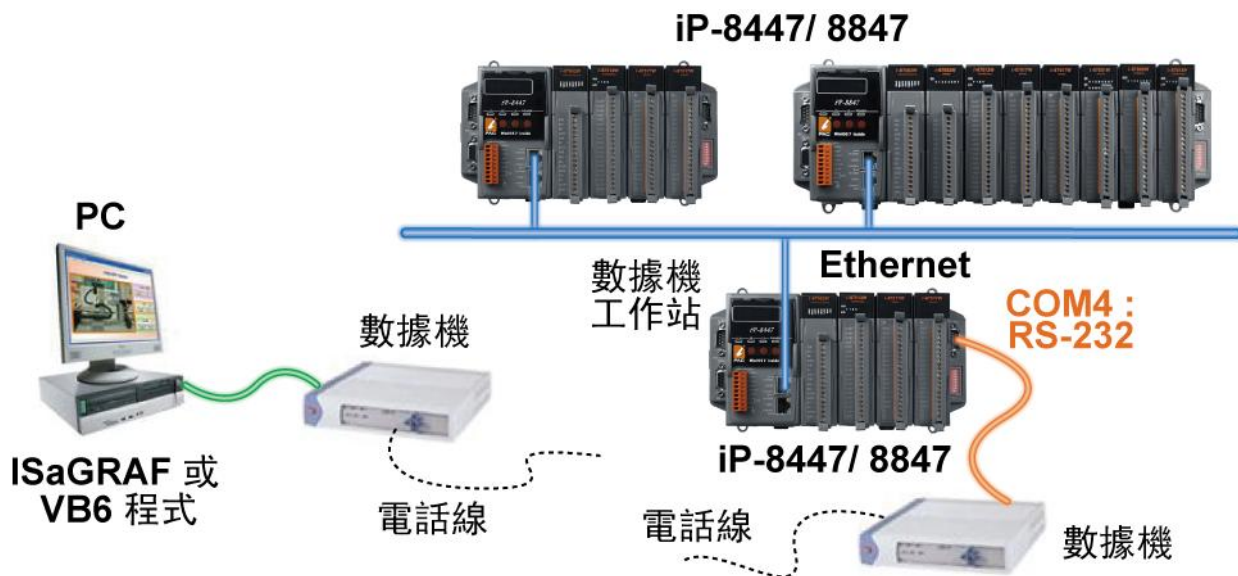


: iP-8x17 Ethernet

1.19

Modem_Link ISaGRAF

iP-8447/8847 I/O



CD:\napdos\isagraf8000\chinese manual\Chinese User Manual I 8xx7.pdf

2.1 1 ISaGRAF

ISaGRAF

- A. ISaGRAF Workbench
- B. ICP DAS Utilities For ISaGRAF

ISaGRAFWorkbenchver.3 (ISaGRAF32,ISaGRAF256) PC
 (B) iP-8xx7 CD

ISaGRAF

- > Windows 95 / Windows 98 / Windows 2000
- > Windows NT Version 3.51/Windows NT Version 4.
- > Windows XP Vista Windows 7

(www.icpdas.comFAQ > Software >ISaGRAF Ver.3 > FAQ117

ISaGRAF

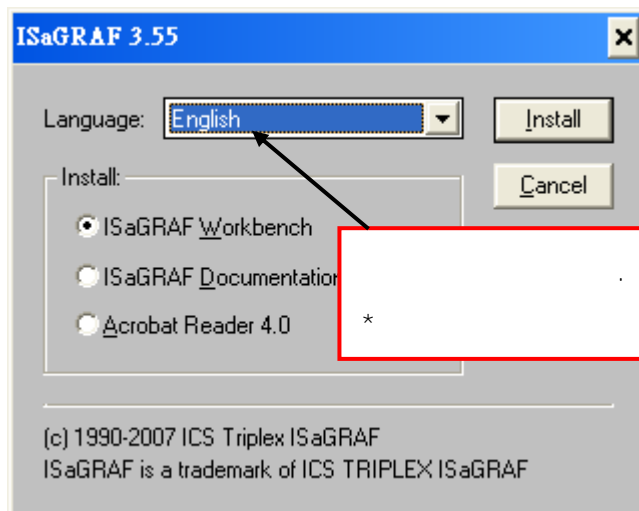


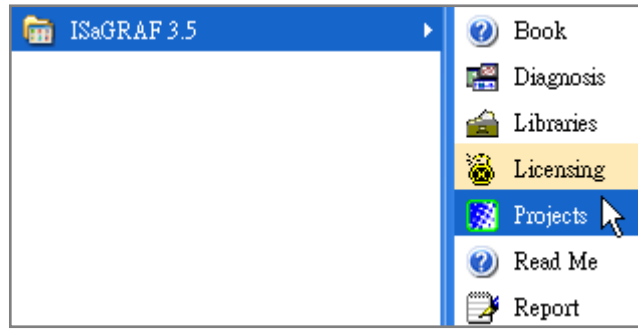
Windows Vista Windows (32bit) [2.1.4](#)
 Windows (64bit) [2.1.5](#)

ISaGRAF

(

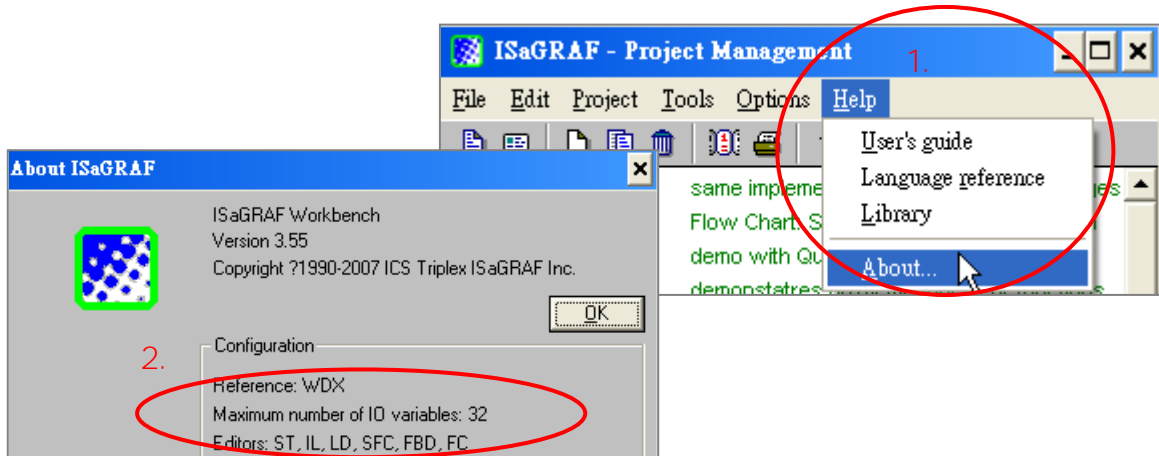
@ o 8 k ° 7)





2.1.1

ISaGRAF (dongle:) USB
 (ISaGRAF 3.51) ISaGRAF (ISaGRAF32E ISaGRAF32C
) ISaGRAF [Help] > [About]
 ISaGRAF



U @ \

Dongle :

(ISaGRAF) :

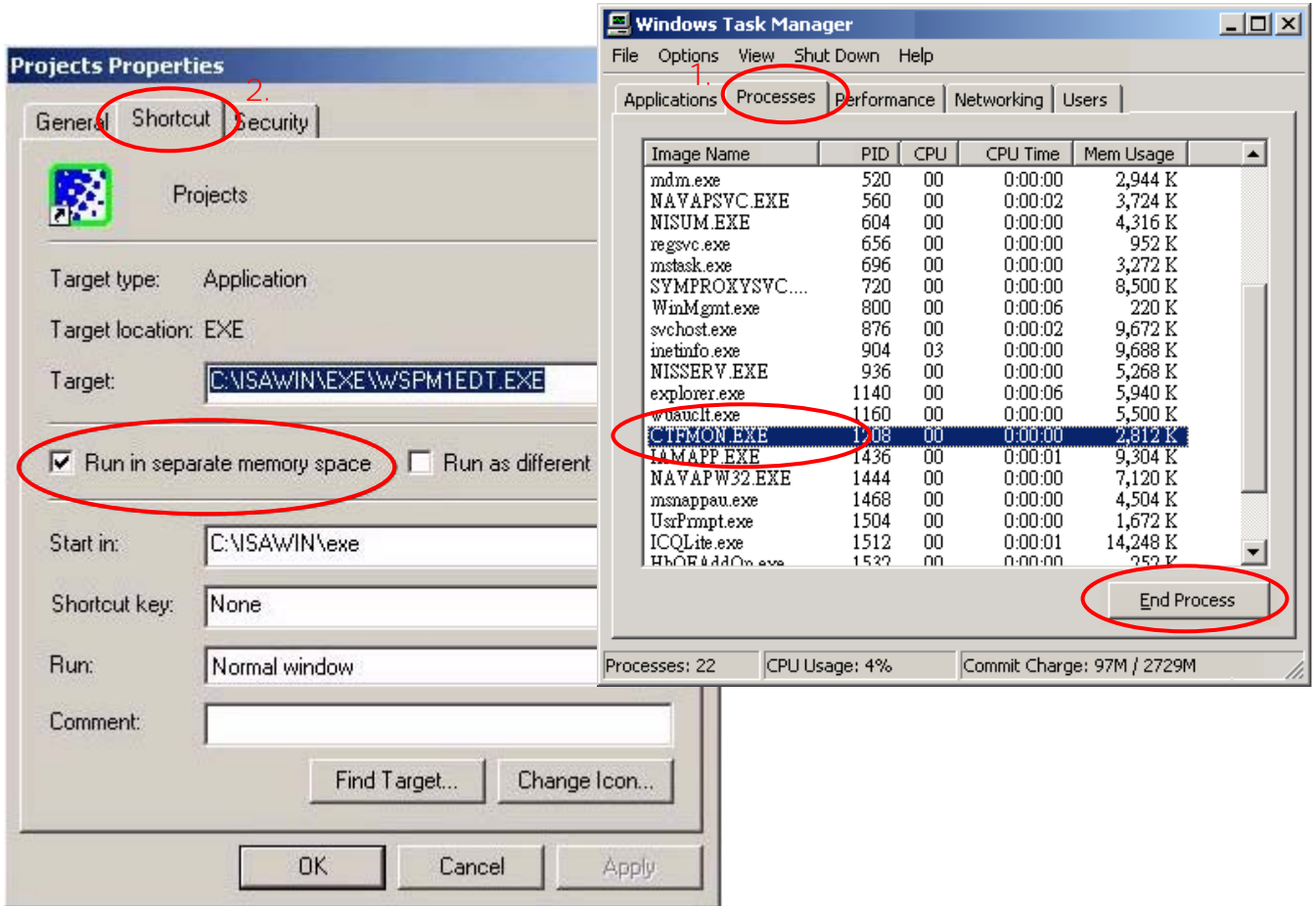
- ' ISaGRAF80 : \Sentinel5382\setup.exe
- ' ISaGRAF : \Sentinel\setup.exe

USB :

1. ISaGRAF USB ISaGRAF 3.51~3.55
 \Sentinel\SSD541-B2bit.exe
2. , ISaGRAF , USB

2.1.2 Window 2000

IsaGRAF 20 ~ 40 () Windows 2000
 # u 7 U \ V - ☒ - # # u 7 U \ V - ☒ -
 @ o 8 k * 7 o k



2.1.3 Windows NT

Windows NT IsaGRAF - ☒ -
 V u IsaGRAF C C:\ISAWIN\EXE\isa.ini

ASCII (Notepad UltraEdit32) [WS001]
 () [WS001] Windows NT
 RS-232 V u
 [WS001]
 NT=1
 Isa=C:\ISAWIN
 IsaExe=C:\ISAWIN\EXE
 Group=Samples
 IsaApl=c:\isawin\smp
 IsaTmp=C:\ISAWIN\TMP

2.1.4 Windows Vista Windows 7 (32bit)

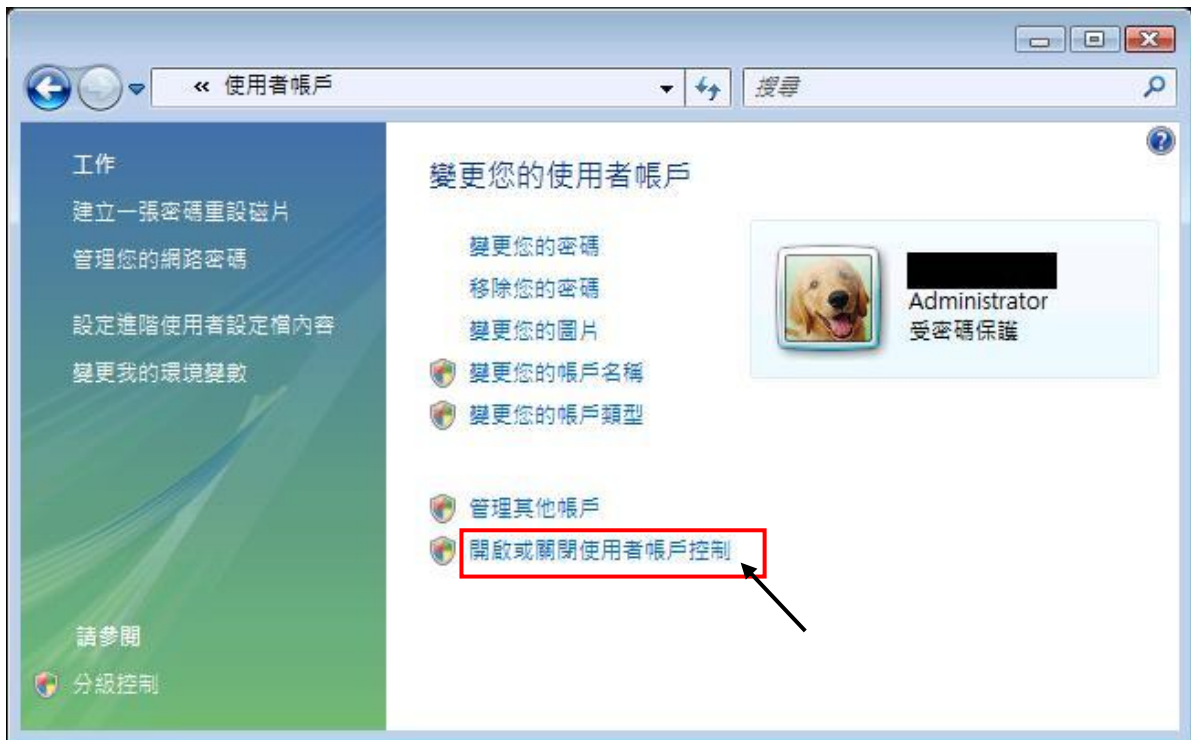
ISaGRAF

Windows Vista Windows (32bit)

?

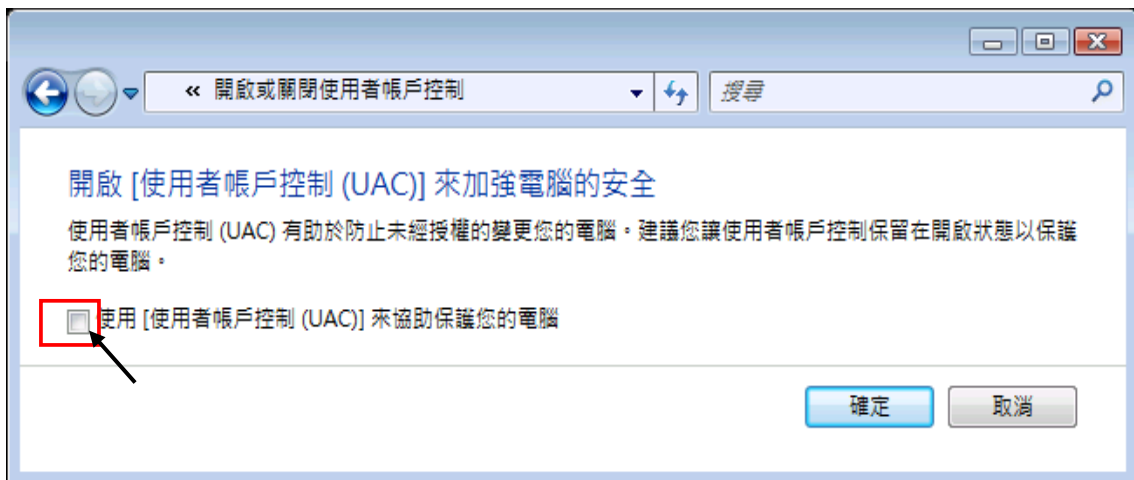


1. [] > [] > [] > [] > []
[] []

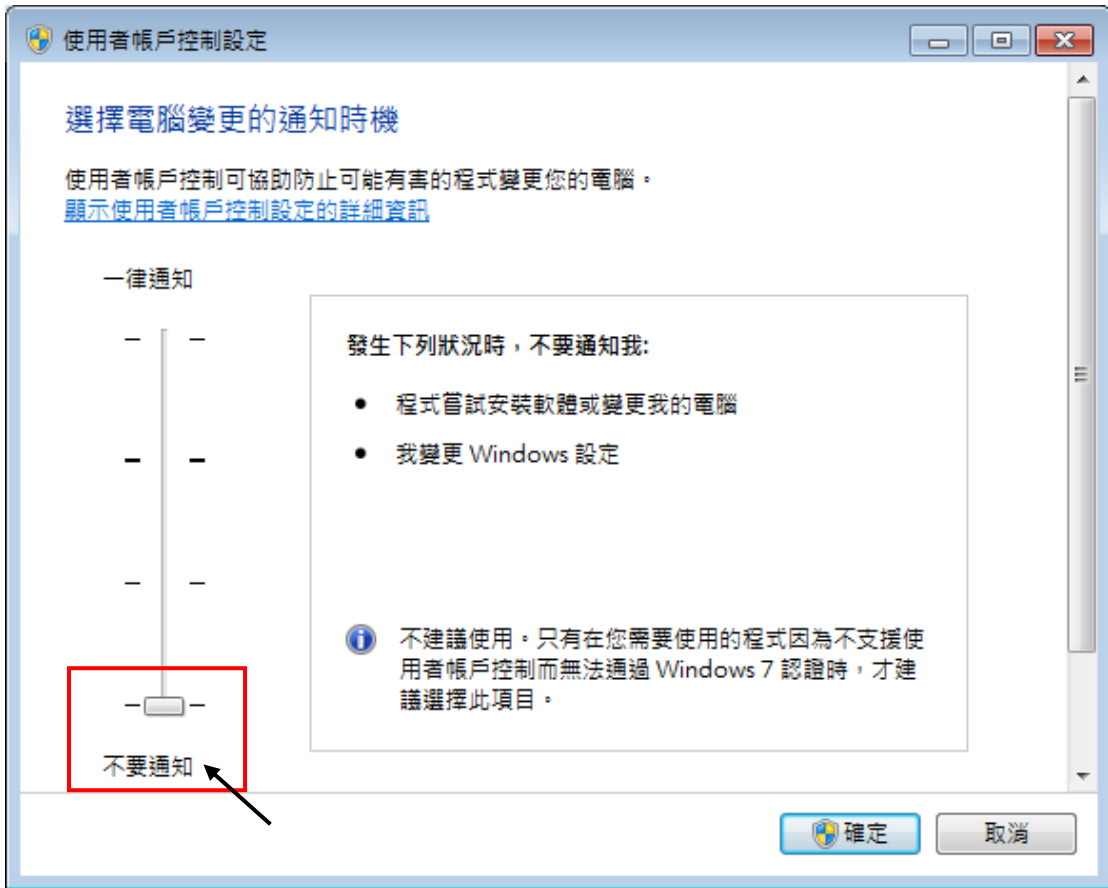


- 2.

Windows Vista



Windows 7:



- 3.
- 4.

[2.1 ISaGRAF](#)

2.1.5 Windows 7 (64bit)

Windows 7 (64bit) Professional, Enterprise, Ultimate : XP Mode
 ISaGRAF Virtual PC XPMODE

Virtual PC XPMODE:

1. Windows Virtual PC (<http://go.microsoft.com/fwlink/?LinkID=160479>) Windows Virtual PC Windows XP Mode
2. WindowsXPMode-en-NN.exe (nn-NN en-US) Windows XP Mode
3. Windows6-KB958559-64.msu Windows Virtual PC
- 4.
5. [] > [] > [Windows Virtual PC] [Windows XP Mode]
6. Windows XP Mode
7. [2.1](#) ISaGRAF

2.1.6 (Variable Arrays) :

c:\isawin\exe\isa.ini :

[DEBUG]
Arrays=1

2.2 2 ICP DAS Utilities For ISaGRAF

@# h) ° o y 3 7 : @ o 8 k ° 7

- > I/O libraries ISaGRAF PAC
- > Modem_Link utility
- > Autoscan I/O utility

:

ISaGRAF ([2.1: 1](#))

iP-8xx7 ICP DAS Utilities For ISaGRAF

\napdo\isagrafsetup.exe

:

ICP DAS Utilities For ISaGRAF

<http://www.icpdas.com/products/8000/isagraf.htm> (from www.icpdas.com Software \SaGRAF)

"Driver" "io_libzip" (C:\)

