

1 Package Contents 包裝明細：

◆ The complete package consists of:

- 1 GN0116 Station
- 1 AC Source Power Cord
- 8 Power Outlet Power Cords*
- 1 RS-232 (F) to RJ-45 Cable
- 1 RJ-45 Cable
- 2 Temperature Sensor Sets
- 1 User Manual
- 1 Quick start guide
- 1 Mounting Kit : Rack mounting brackets and hardware
- 4 Foot pads
- 1 Software CD
- 1 Warranty registration card

* Included for countries which utilize a power source of 220~250V

Outlet Version:
220-250V IEC320-C13



Power cord : The power source is a 220~250V AC supply, use a tandem (T blade) type attachment plug with ground conductor power cord that meets the respective European country's safety regulations, such as VDE for Germany. Plug should comply with the VDE 0620 specification; the connector should comply with the VDE 0625 specification. A minimum 10A, 0.75 mm 2 x 3G power cord (H05VV-F or VW-1) should be used.

Power outlet cord : Connector should comply with the VDE 0625 or EN60320 specification. A minimum 10A, 0.75 mm2 x 3G power cord (H05VV-F or VW-1) should be used.

Note:
Use the power cord supplied with this package. If you need to purchase additional power cord, you must choose ones that comply with the above specifications.

◆ 本產品完整包裝內容包含如下：

- 1 台GN0116主機
- 1 組AC電源線
- 8 組電源插座線*
- 1 RS-232 (母)轉 RJ-45線材
- 1 RJ-45介面線材
- 2 組溫度感應器
- 1 使用者手冊
- 1 快速安裝指南
- 1 組安裝配件:包含機架安裝固定片與五金配件
- 4 腳墊
- 1 軟體CD光碟片
- 1 保固註冊卡

* 於電力供給之電壓為220~250V的國家，始包含該配件

Outlet Version:
220-250V IEC320-C13



2 The GN0116 Unit (Front View) GN0116主機 (前視圖)

◆ 1. Power Outlets

AC Programmable Power Outlets

The power cables that connect to the computers plug in here.

There are 8 ports, and the output ranges of voltage and current for each port are:

Max AC: 125V / 15A; 50~60 Hz
220~250V / 10A, 50~60 Hz

The output voltage type of each port varies according to the input voltage type of the corresponding port. The power source inlet and their corresponding programmable power outlets are listed in the following table:

Power Source 1:109~110
Power Source 2:111~112
Power Source 3:113~114
Power Source 4:115~116

2. Port LEDs

The Port LEDs provide status information about their corresponding AC Power Outlets.

- The LED is OFF when the Outlet power is OFF
- A LED lights GREEN to indicate the outlet power in ON

◆ 1. 電源插座

將連接於電腦的電源線插於此

其共有8個此種連接埠，而每埠的電壓與電流的輸出範圍為：

最大 AC: 125V / 15A; 50~60 Hz
220-250V / 10A, 50~60 Hz

而每埠的輸出電壓類型，將依照其相對埠的輸入電壓類型而變化；電源輸入及其相對應程式化的電源插座羅列如下表：

電源 1: 109~110
電源 2: 111~112
電源 3: 113~114
電源 4: 115~116

注意：

此處程式化電源插座於正常時為短路，所以其預設電源狀態為開啟

2.LED指示燈

LED指示燈可提供其相對應的AC電源插座之狀態訊息

- 當插座電源為關閉時，則LED燈亦為關閉狀態
- 當LED指示燈顯示為綠色時，表示其插座電源為開啟的狀態



3 The GN0116 Unit (Rear View) GN0116主機 (後視圖)

◆ 1. Circuit Breaker

Press to reset the circuit in order to recover from an overcurrent condition.

2. Power Switch

This standard rocker switch powers the GN0116 On and Off.

3. AC Power Source

The power source that is needed to supply the AC Power Outlets are connected in here. One power source will supply power to the two corresponding AC Power Outlets.

4. Communication Ports

- Ethernet Port: This port can be used to remotely login to the GN0116.
- RS-232 Port: This port can be used to connect directly to external computers or via a modem to conduct local or remote monitoring, software updates and etc.
- RS485:In a daisy chained installation, the RS485 cable from the Chain Out port of the parent unit plugs in here. The maximum serious connection allows of 256 units.

5. Status LEDs

- Power LED: The Power LEDs provide status information about the power: ON, OFF.
- CPLD: Provides information regarding the CPLD status. Flashes GREEN during normal operations. Remains steady GREEN during boot load mode.
- MCU: Provides information about the MCU status. Flashes YELLOW during normal operations. Remains steady YELLOW during boot load mode.

6. Analog and Digital I/O Ports

- Resistance Analog Input Ports (Port 1 - 4): Devices which require input Resistance plugs in here.
- Voltage Analog Input Ports (Port 31-32): Devices which require input Voltage plugs in here.
- Digital Input Ports (Port 201 - 202): Devices which require digital input plugs in here.
- Digital Output Ports (Port 101 - 108): Devices which require digital output plugs in here.

7. Reset Switch

Pressing and holding this switch in for more than five seconds, the GN0116 will go into boot load mode This switch is recessed and must be pushed with a think object, such as the end of a paper clip, or a ballpoint pen. Do not use unless it is necessary to reset the unit.

8. Power Input

The power cable plugs in here to provide power to the GN0116.

◆ 1. 電路遮斷器

欲從過電流的情況恢復，請按此以重設電路

2. 電源開關

標準的電源按鍵開關，可切換以開啓或關閉GN0116電源

3. AC 電源口

此電源口將需供應電源給連接於此的AC電源插座；每個電源口將供應電源予以相對應的兩組AC電源插座

4. 通訊埠

- 乙太網路埠: 此埠可讓使用者從遠端登錄至GN0116
- RS-232埠:此埠提供使用者可直接連接外部電腦或是透過數據機，以從近端或遠端執行監控與更新軟體...等功能
- RS485:為RS485線材串接插入埠。最多可串接到256台

5.LED指示燈狀態

- 電源LED指示燈: 電源LED指示燈顯示電源開或關的狀態訊息
- CPLD: 依照CPLD的狀態提供訊息。當正常操作下，其會顯示綠色閃爍; 當於開啟程式載入模式下，則其會呈現綠色持續的狀態
- MCU: 提供MCU狀態訊息。當正常操作下，其會顯示黃色閃爍; 當於開啟程式載入模式下，則其會呈現黃色持續的狀態

6. 類比與數位輸入/輸出埠

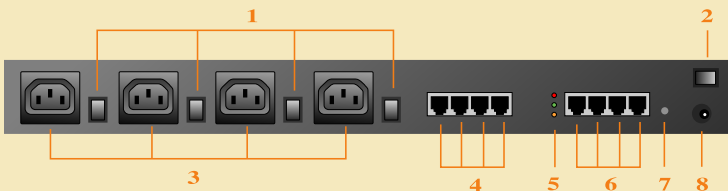
- 電阻類比輸入埠 (埠1~4): 需要輸入電阻的裝置可插於此
- 電壓類比輸入埠 (埠31~32): 需要輸入電壓的裝置可插於此
- 數位輸入埠 (埠201~202): 需要數位輸入的裝置可插於此
- 數位輸出埠 (埠101~108): 需要數位輸出的裝置可插於此

7. 重置開關

持續按住此開關約5秒鐘，可讓GN0116進入開機初始程式載入模式(boot load mode)。此開關為內嵌式設計，必須透過紙夾或圓珠筆尖端以使用之。除非使用者有重置本設備的需求，否則請勿使用此功能

8. 電源輸入

將電源線插於此以提供GN0116電源



4 Software Installation 軟體安裝

- ◆ To install the Software, insert the installation CD included with the GN0116 into the computer CD-Rom drive. Simply execute the self extracting setup program (Altusen GN0116 V1.6.exe) and press next. Accept the Licensing Agreement and follow the wizard's instructions

- ◆ 請將GN0116所配備的安裝軟體光碟，插入至電腦的CD光碟機內，以進行安裝作業；可簡便地執行自動安裝程序(Altusen GN0116 V1.6.exe)，及選取"next" (下一步)，並接受授權合約，遵循操作說明以完成安裝作業

5 Hardware Installation 硬體安裝

- ◆ 1. To connect an external computer to the system unit and begin monitoring and control, you may establish the connection through either Ethernet or RS232 port. Please see the following sections for instructions
- 2. Use the AC power cord provided with this package to connect the GN0116's Power Socket to an AC power source.
- 3. Once you are cabled up, you can turn on the GN0116 and the connected devices.

- ◆ 1. 為了連接一台外部電腦至系統裝置上，並開始進行監視與控制，您需透過乙太網路或是RS-232連接埠以建立連線。請參閱以下相關說明以操作使用
- 2. 使用本產品組合所附的AC電源線以連接GN0116的電源插座至AC 電源端。
- 3. 當您完成線材的安裝後，您可以開啓GN0116及其所接續的裝置。

6 Ethernet Installation

- ◆ Plug one end of the ethernet cable provided with this package into the Ethernet Port located on the rear panel of the GN0116.

Plug the other end of the ethernet cable into the ethernet port of your network.

Note:

If either the unit or the computer is not connected to the LAN, communication between the two via network will fail. Use the DC power adaptor provided with this package to connect the GN0116's DC jack to an DC power source.

Note:

We strongly advise that you do not plug the GN0116 into a multi socket extension cord, since it may not receive enough amperage to operate correctly.

7 乙太網路安裝

- ◆ 使用本產品組合所提供的乙太網路線的其中一端，連接至位於GN0116背板上的乙太網路埠。

將乙太網路線的另一端連接到，您網路上的乙太網路埠。

注意:

如果本裝置或是電腦並沒有被連接至網路上，則此兩設備將無法透過網路進行溝通。

使用本產品組合所附的DC電源變壓器，以連接GN0116的DC電源插口至一DC電源端。

注意:

強烈地建議您，不要將GN0116的電源線插到多插座的延長器上，以避免因無足夠的電流強度，而無法正確地操作

8 RS232 Installation RS232安裝

- ◆ 1.Take out the RS232 / RJ45 cable form the product package. Plug the RJ45 end to the 232C port of system unit and the other end to the 9 PIN D-Type of the computer.
- 2. Plug in the system unit and switch on power.

Note:

If there is no RS232 port on the computer, you need a RS232 / USB adapter, which is not included in the product package and has to be purchased separately.

- ◆ 1. 取出本產品包裝所附的RS232 / R.J45線材，將RJ45端插至系統裝置上的232C埠，並將另外一端插至電腦上9 PIN D-Type的連接埠上。
- 2. 將系統裝置插上電源並開啓之

注意:

如果於電腦上沒有RS-232連接埠，您需要一個RS232 / USB轉換器，其需要另外購買，並非包含於此產品包裝內。

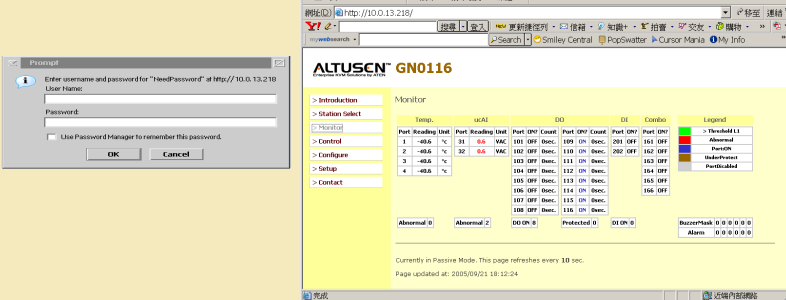
9 Browser operation 瀏覽器操作

- ◆ The most convenient way to operate the GN0116 is with an internet browser.

To begin:

- ◆ 透過網路瀏覽器使用，是GN0116最便利的操作方法。

開始：



- ◆ Provide a valid Username and Password (set by the GN0116 administrator), then Click Login to continue. Default IP Address: 10.0.50.100

Note:

If this is the first time logging in, the Default User Name is set to admin and the Default Password is left blank.

- ◆ 輸入一組有效的使用者名稱與密碼 (由GN0116管理者設定)，然後點選登入(Login)以繼續。預設IP位址：10.0.50.100

注意:

如果此是首次登入，其預設的使用者名稱為admin，而預設的密碼則無需輸入

* Battery Replacement

This equipment is provided with a replaceable lithium battery: CR2032 3V.Replacement by an incorrect type may result in an explosion.

CAUTION!
RISK OF EXPLOSION IF BATTERY IS REPLACED BY ANINCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO THEINSTRUCTIONS.

10 Specifications 規格

Function	Specification
Connectors	AC Power Inlets AC Power Outlets (Ports 1~8/109~116) Power LAN 232C 485 Output 485 Input Resistance Analog Input/Digital Output (Ports 1&2/101&102) Resistance Analog Input/Digital Output (Ports 3&4/103&104) Digital Input/Digital Output (Ports 201&202/105&106) Voltage Analog Input/Digital Output (Ports 31&32/107&108)
LEDs	Power CPLD MCU AC Power Outlets (Ports 1~8/109~116)
IP Rating	Power Per AC Power Inlet
O/P Rating	Total AC Power Outlets (Ports 1&2/109&110) Total AC Power Outlets (Ports 3&4/111&112) Total AC Power Outlets (Ports 5&6/113&114) Total AC Power Outlets (Ports 7&8/115&116)
Switches	Power Reset Circuit Breakers
Power Consumption	DC 12V: 30W
Environment	Operating Temperature: 0 ~ 50 °C Storage Temperature: -20 ~ 60 °C Humidity: 0 ~ 90% RH Noncondensing
Housing	Metal
Weight	2.3kg
Dimensions (L x W x H)	44 x 15.4 x 4.45 cm

Function	Specification
介面	AC 電源輸入 AC 電源插座 (連接埠1~8/109~ 116) 電源 網路 232C 485輸出 485輸入 電阻 類比輸入/數位輸出 (連接埠 1&2/ 101&102) 電阻 類比輸入/數位輸出 (連接埠 3&4/ 103&104) 數位輸入輸出 電阻 (連接埠 201&202/ 105&106) 電壓 類比輸入/數位輸出 (連接埠 31&32/ 107&108)
LED指示燈	電源 CPLD MCU AC電源插座 (連接埠 1~8/ 109~116)
輸入功率	電源 每一AC電源輸入
輸出功率	總AC 電源插座 (連接埠 1&2/ 109&110) 總AC 電源插座 (連接埠 3&4/ 111&112) 總AC 電源插座 (連接埠 5&6/ 113&114) 總AC 電源插座 (連接埠 7&8/ 115&116)
接觸	電源 重置 電路電路器
耗電量	DC 12V: 30W
環境	操作溫度 儲存溫度 濕度
外觀	金屬
重量	2.3 kg
尺寸 (長×寬×高)	44×15.4×4.45 cm