

# Delta InfraSuite EMS

Environmental Management System

EnviroProbe 1100

## Installation & Operation Quick Guide

ENGLISH

### 1 Product Introduction

The EnviroProbe 1100 offers four digital output connections to connect and control devices such as alarms or magnetic locks. It gives signals to its connected devices so the devices will go off alarms, activate or inactivate locks, etc. The unit must be connected to either an EnviroStation (station communication mode) or an InsightPower SNMP IPv6 Card (NMC communication mode). If you connect the unit to an EnviroStation (station communication mode), you can cascade up to 4 EnviroProbe 1100 units to monitor the environment of larger areas.

### 2 Usage Warnings

- This guide contains important instructions and warnings that you should follow during the installation, operation, and storage of this product. Failure to heed these instructions and warnings will void the warranty.
- This is a class B product. In a domestic environment, this product may cause radio interface in which case the user may be required to take adequate measures.

### 3 Package List

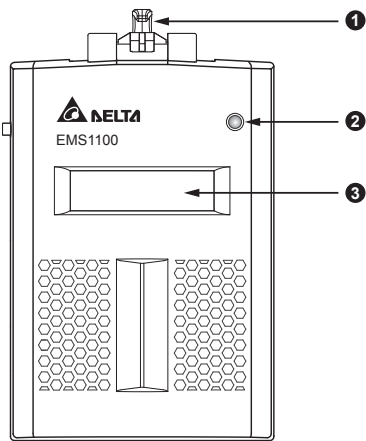
| No. | Item                                 | Q'ty |
|-----|--------------------------------------|------|
| 1   | EnviroProbe 1100                     | 1 pc |
| 2   | Installation & Operation Quick Guide | 1 pc |

### 4 Functions & Features

- The EnviroProbe 1100 must be connected to either an EnviroStation (station communication mode) or an InsightPower SNMP IPv6 Card (NMC communication mode).
- Attaches up to four digital output connections for connecting and controlling devices.
- Cascades up to 4 EnviroProbe 1100 units if you connect the product to an EnviroStation (station communication mode).

### 5 Exterior & Interface Introduction

#### 5.1 Front View



##### 1 Installation Hook

Attaches the unit to a rack or other location.

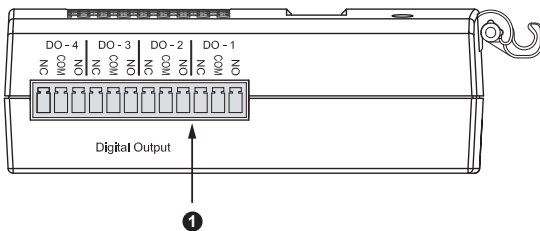
##### 2 System Indicator

- Green light on: Normal.
- Green light flashing: Communication is normal.
- Green light off: Failure or no power.

##### 3 LCD Display

Displays digital output status.

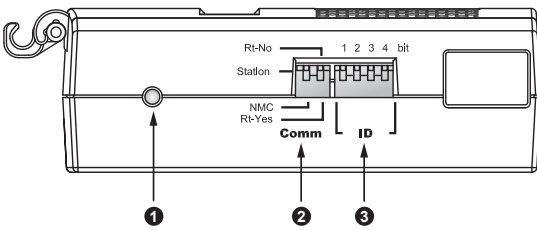
#### 5.2 Right Side View



##### 1 Digital Output

Connect and control indoor devices such as alarms or magnetic locks. The EnviroProbe 1100 gives signals to its connected devices so the devices will go off alarms, activate or inactivate locks, etc. Follow your indoor device design to connect cables to the NO (normally-open), NC (normally-closed) and COM (grounding) pins shown in the figure above.

#### 5.3 Left Side View



##### 1 LCD Switch

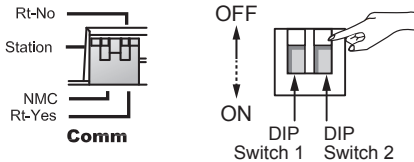
Controls LCD display:

- Press 0.2 second to turn on backlight for 1 minute.
- Press 1.0 second for backlight always on.
- After the backlight is on, press the switch for 0.2 second to turn off the backlight.

##### 2 Comm DIP

- Use DIP Switch 1 to select a communication mode (EnviroStation: station communication mode; InsightPower SNMP IPv6 Card: NMC communication mode).

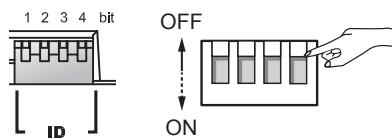
- If you connect an EnviroStation to the EnviroProbe 1100, you must set up DIP Switch 2.
- Please see below for how to set up DIP Switches.



| DIP Switch 1 | OFF | Station:Indicates connection to an EnviroStation.                                                                                                                                                                                    |
|--------------|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DIP Switch 1 | ON  | NMC:Indicates connection to an InsightPower SNMP IPv6 Card.                                                                                                                                                                          |
| DIP Switch 2 | OFF | Rt-No:Only applicable to station communication mode. If you cascade several units of EnviroProbe 1100, make sure that all EnviroProbe 1100 units, except the last one (the farthest to the EnviroStation), are set to <b>Rt-No</b> . |
| DIP Switch 2 | ON  | Rt-Yes:Only applicable to station communication mode. If you cascade several units of EnviroProbe 1100, make sure the last EnviroProbe 1100 (the farthest to the EnviroStation) is set to <b>Rt-Yes</b> .                            |

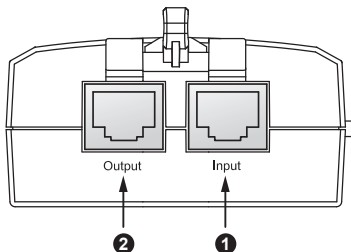
##### 3 ID DIP

When cascading EnviroProbe 1100 (at maximum 4 units), use the ID DIP switches shown below to set up an ID No. for each EnviroProbe 1100.



| ID DIP Switches | ID | ID DIP Switches | ID | ID DIP Switches | ID |
|-----------------|----|-----------------|----|-----------------|----|
| 1 2 3 4         | 0  | 1 2 3 4         | 6  | 1 2 3 4         | 12 |
| 1 2 3 4         | 1  | 1 2 3 4         | 7  | 1 2 3 4         | 13 |
| 1 2 3 4         | 2  | 1 2 3 4         | 8  | 1 2 3 4         | 14 |
| 1 2 3 4         | 3  | 1 2 3 4         | 9  | 1 2 3 4         | 15 |
| 1 2 3 4         | 4  | 1 2 3 4         | 10 |                 |    |
| 1 2 3 4         | 5  | 1 2 3 4         | 11 |                 |    |

#### 5.4 Top View



##### 1 Input

- For InsightPower SNMP IPv6 Card:  
Use a CAT-5 straight-through cable (not provided) to connect the Input connector and the InsightPower SNMP IPv6 Card's COM port.
- For EnviroStation:
  - If the EnviroProbe 1100 is the first unit, use a CAT-5 straight-through cable (not provided) to connect the unit's Input connector and the EnviroStation's Delta-BUS port.
  - If the EnviroProbe 1100 is not the first unit, use a CAT-5 straight-through cable (not provided) to connect the unit's Input connector and its previous unit's Output connector.

##### 2 Output

If you connect the EnviroProbe 1100 to an EnviroStation, you can cascade up to 4 EnviroProbe 1100 units through this Output connector (RJ-45). CAT-5 straight-through cables are required (not provided).

### 6 Installation

- Find a location that allows you to connect and route the EnviroProbe 1100's cable conveniently. Avoid locations in direct sunlight, near a heat source, or next to a window.
- Hook the EnviroProbe 1100 to a rack or attach it to a wall or other location using screws or other means such as magnets.
- Use a CAT-5 straight-through cable (not provided) to connect the EnviroProbe 1100 to either an InsightPower SNMP IPv6 Card or an EnviroStation. For more information, please refer to **5.4 Top View**.
- If you connect the EnviroProbe 1100 to an EnviroStation, you can cascade up to 4 EnviroProbe 1100 units with CAT-5 straight-through cables (not provided) running between each unit's Input and Output connectors. Please note that each EnviroProbe 1100 must have a unique ID address that you can set with the ID DIP Switches. Please refer to **5.3 Left Side View**.

### 7 Technical Specifications

|                       |                                                         |                                             |
|-----------------------|---------------------------------------------------------|---------------------------------------------|
| Model No.             | EMS1100                                                 |                                             |
| Material No.          | EMS1100035                                              |                                             |
| Electrical            | Input Voltage                                           | 12 Vdc                                      |
|                       | Input Current @12 Vdc                                   | 205 mA (full load)                          |
|                       | Power Consumption                                       | 2.46W (full load)                           |
| Digital Output (Max.) | Contact Voltage/ Contact Current/ Contact Power         | 60 Vdc/ 1A/ 60W                             |
|                       |                                                         | 30 Vac/ 2.08A/ 62.5 VA                      |
| Environmental         | Operating Temperature                                   | 0 ~ 45°C                                    |
|                       | Operating Humidity                                      | 20 ~ 90% RH (non-condensing)                |
|                       | Storage Temperature                                     | 0 ~ 60°C                                    |
|                       | Storage Humidity                                        | 0 ~ 90% RH (non-condensing)                 |
| Physical              | Dimensions (W x D x H)                                  | 66 x 33 x 103 mm                            |
|                       | Weight                                                  | 130g                                        |
| Certification         | Safety                                                  | CE                                          |
|                       | EMI                                                     | EN55022 (CISPR 22) Class B                  |
|                       | EMS                                                     |                                             |
|                       | - IEC 61000-4-2 (ESD Test)<br>- IEC 61000-4-6 (CS Test) | EN55024<br>Level 3 @ Air 8 KV/ Contact 4 KV |

### 8 Warranty

Seller warrants this product, if used in accordance with all applicable instructions, to be free from original defects in material and workmanship within the warranty period. If the product has any failure problem within the warranty period, Seller will repair or replace the product at its sole discretion according to the failure situation. This warranty does not apply to normal wear or to damage resulting from improper installation, operation, usage, maintenance or irresistible force (i.e. war, fire, natural disaster, etc.), and this warranty also expressly excludes all incidental and consequential damages. Maintenance service for a fee is provided for any damage out of the warranty period. If any maintenance is required, please directly contact the supplier or Seller. **WARNING:** The individual user should take care to determine prior to use whether the environment and the load characteristic are suitable, adequate or safe for the installation and the usage of this product. The Quick Guide must be carefully followed. Seller makes no representation or warranty as to the suitability or fitness of this product for any specific application.

Copyright © 2013 by Delta Electronics Inc. All rights reserved. Changes may be made periodically to the information in this Quick Guide without obligation to notify any person of such revision or changes.

台达 InfraSuite  
全面环境监控系统

环境监测器 1100

安装操作指南

简体中文

1 产品简介

环境监测器 1100 提供 4 组数字输出接口，能够控制与它连接的装置，作为故障信号报警输出（如连接至警报器），也可以作为启动或解除指定之外部装置（如电磁锁）。本产品必须连接中央监测站（Station 通讯模式）或是 InsightPower SNMP IPv6 卡（NMC 通讯模式）。若连结至中央监测站，可串接多达 4 台的环境监测器 1100，以进行更大面积的环境监控。

2 注意事项

- 本指南包含环境监测器 1100 的功能、安装、操作以及存储等说明，请按照本指南操作并妥善保管。不按照要求操作，无法享受保修服务。
- 该产品属于 B 类产品，在家庭环境中使用该产品可能会造成无线电干扰，使用过程中，请采取适当保护措施。

3 包装清单

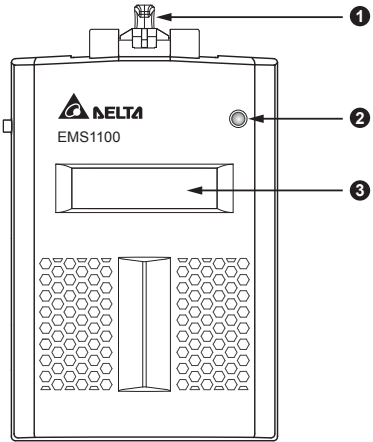
| 项次 | 项目         | 数量  |
|----|------------|-----|
| 1  | 环境监测器 1100 | 1 台 |
| 2  | 安装操作指南     | 1 张 |

4 功能与特色

- 本产品必须连接中央监测站（Station 通讯模式）或是 InsightPower SNMP IPv6 卡（NMC 通讯模式）。
- 提供 4 组数字输出接口，用来控制与其连接的装置。
- 若连结至中央监测站（Station 通讯模式），可串接多达 4 台环境监测器 1100。

5 外观与界面介绍

5.1 前视图



1 安装挂勾

可以单个挂在机架或方便悬挂的其它位置。

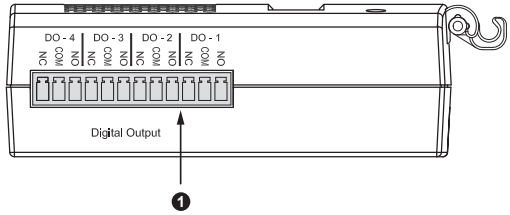
2 系统指示灯

- 绿灯恒亮：正常使用。
- 绿灯闪烁：通讯正常。
- 绿灯熄灭：失效或没有供电。

3 LCD 显示器

显示数字输出状态。

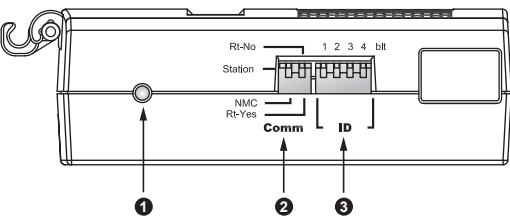
5.2 右视图



1 Digital Output (数字输出)

可以作为故障信号报警输出（如连接至警报器），也可以作为启动或解除指定之外部装置（如电子锁）。依照不同外部装置，将线路连接到接地（COM）、常开（NO）或常关（NC）。

5.3 左视图



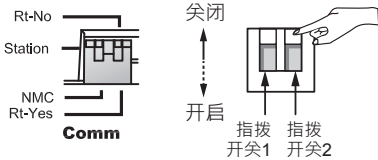
1 LCD 开关

控制 LCD 显示器背光：

- 按 0.2 秒，开启背光 1 分钟。
- 按 1 秒，背光常开。
- 背光开启后再按 0.2 秒，背光关闭。

2 Comm DIP (通讯模式指拨开关)

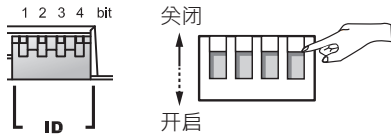
- 用指拨开关 1 来选择连接至中央监测站（Station 通讯模式）或是 InsightPower SNMP IPv6 卡（NMC 通讯模式）。
- 如果连至中央监测站，则需调整指拨开关 2。
- 指拨开关设定请参阅下图。



| 指拨开关 1 | 关闭 | Station 表示连接到中央监测站。                                                         |
|--------|----|-----------------------------------------------------------------------------|
|        | 开启 | NMC 表示连接到 InsightPower SNMP IPv6 卡。                                         |
| 指拨开关 2 | 关闭 | Rt-No：仅在 Station 通讯模式使用。若串接多台环境监测器 1100，需要将第一台（最接近中央监测站）到倒数第二台的开关开启到 Rt-No。 |
|        | 开启 | Rt-Yes：仅在 Station 通讯模式使用。若串接多台环境监测器 1100，需要将最后一台（最远离中央监测站）的开关开启到 Rt-Yes。    |

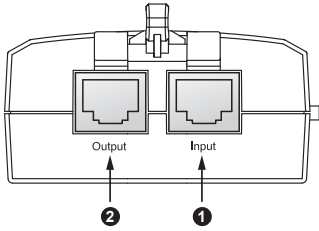
3 ID DIP (ID 指拨开关)

当 4 个环境监测器 1100 串接时，用这 4 个指拨开关来设置各个环境监测器 1100 的 ID，以便识别。



| 指拨开关    | ID | 指拨开关    | ID | 指拨开关    | ID |
|---------|----|---------|----|---------|----|
| 1 2 3 4 | 0  | 1 2 3 4 | 6  | 1 2 3 4 | 12 |
| 1 2 3 4 | 1  | 1 2 3 4 | 7  | 1 2 3 4 | 13 |
| 1 2 3 4 | 2  | 1 2 3 4 | 8  | 1 2 3 4 | 14 |
| 1 2 3 4 | 3  | 1 2 3 4 | 9  | 1 2 3 4 | 15 |
| 1 2 3 4 | 4  | 1 2 3 4 | 10 |         |    |
| 1 2 3 4 | 5  | 1 2 3 4 | 11 |         |    |

5.4 上视图



1 Input (输入接口)

- 连接 InsightPower SNMP IPv6 卡  
使用 CAT-5 直通电缆（未提供）连接 Input（输入接口）与 Insi-ghtPower SNMP IPv6 卡的 COM 接口。
- 连接中央监测站  
若为第一台环境监测器 1100，请使用 CAT-5 直通电缆（未提供）连接 Input（输入接口）与中央监测站背板上的 Delta-BUS 接口。  
若非第一台环境监测器 1100，请使用 CAT-5 直通电缆（未提供）连接 Input（输入接口）与上一台环境监测器 1100 的 Output（输出接口）。

2 Output (输出接口)

若将环境监测器 1100 连接至中央监测站，可透过此 Output（输出接口）（RJ45）串接高达 4 台环境监测器 1100。需使用 CAT-5 直通电缆（未提供）。

6 安装步骤

- 请选择一个方便安装环境监测器 1100 和走线的位置。避免阳光直射、靠近热源、或接近窗口。
- 可将环境监测器 1100 悬挂在机架上、或用螺钉、其它工具如磁铁，安装到墙上或其它地方。
- 使用 CAT-5 直通电缆（未提供）将环境监测器 1100 连接至 InsightPower SNMP IPv6 卡或是中央监测站。相关讯息请参考 5.4 上视图。
- 若将环境监测器 1100 连接至中央监测站，可透过每台环境监测器 1100 的 Input（输入接口）和 Output（输出接口），用 CAT-5 直通电缆（未提供）上下串接最多 4 台环境监测器 1100。请注意，每台环境监测器 1100 只能有一个唯一的 ID，可用 ID 指拨开关进行设置，请参考 5.3 左视图。

7 产品规格

|             |                                                     |                                               |
|-------------|-----------------------------------------------------|-----------------------------------------------|
| 型号          | EMS1100                                             |                                               |
| 料号          | EMS1100035                                          |                                               |
| 电气规格        | 输入电压                                                | 12 Vdc                                        |
|             | 输入电流 @12 Vdc                                        | 205 mA (满载)                                   |
|             | 功耗                                                  | 2.46W (满载)                                    |
| 数字输出规格 (最大) | 接点电压 / 接点电流 / 接点耐受                                  | 60 Vdc / 1A / 60W<br>30 Vac / 2.08A / 62.5 VA |
|             | 运行温度                                                | 0 ~ 45°C                                      |
| 环境          | 运行湿度                                                | 20 ~ 90% RH (无凝露)                             |
|             | 储存温度                                                | 0 ~ 60°C                                      |
|             | 储存湿度                                                | 0 ~ 90% RH (无凝露)                              |
| 外观          | 尺寸 (宽 x 深 x 高)                                      | 66 x 33 x 103 毫米                              |
|             | 重量                                                  | 净重 130 公克                                     |
| 认证          | 安规                                                  | CE                                            |
|             | 电磁干扰 (EMI)                                          | EN55022 (CISPR 22) Class B                    |
|             | 电磁耐受性 (EMS)                                         | EN55024                                       |
|             | - IEC 61000-4-2 (静电放电测试)<br>- IEC 61000-4-6 (CS 测试) | Level 3 @ Air 8 KV/Contact 4 KV               |

8 产品保修

本产品具有质量保证，若产品在保修期内发生故障，卖家可根据故障发生的具体情况决定提供换机或者免费维修，但不包括因不正常安装、操作、使用、维护或者人力不可抗拒之因素（如战争、火灾、天灾等）造成的损坏。本保证亦排除所有意外损失及意外后相继发生的任何损失。

产品在保修期外的任何损坏，卖家都不负责免费维修，但可提供有偿服务。当产品故障需要报修时，请致电产品的直接供货商，或者拨打卖家服务电话。

**警示：**使用该产品前，需要确认是否适合安装地的自然及电力环境和负载特性，并且一定要按照本指南要求的方法去安装和使用，卖家对特定的应用不另行做任何规范或保证。

9 关于有毒有害物质与元素

- 有毒有害物质或元素的名称及其含量表（依照中国《电子信息产品污染控制管理办法》）

| 部件名称    | 有毒有害物质或元素 |        |        |             |            |             |
|---------|-----------|--------|--------|-------------|------------|-------------|
|         | 铅 (Pb)    | 汞 (Hg) | 镉 (Cd) | 六价铬 (Cr 6+) | 多溴联苯 (PBB) | 溴二苯醚 (PBDE) |
| 金属外壳    | O         | O      | O      | O           | O          | O           |
| 塑料外壳    | O         | O      | O      | O           | O          | O           |
| 印刷电路板   | X         | O      | O      | O           | O          | O           |
| 插座      | X         | O      | O      | O           | O          | O           |
| 电缆及配线   | X         | O      | O      | O           | O          | O           |
| 连接器及断路器 | O         | O      | X      | O           | O          | O           |
| 密封铅酸电池  | X         | O      | O      | O           | O          | O           |
| 变压器     | O         | O      | O      | O           | O          | O           |
| 其它      | X         | O      | O      | O           | O          | O           |

O：表示该有毒物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 标准规定的限量要求以下。  
X：表示该有毒物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006 标准规定的限量要求。  
注：印刷电路板：包含空的印刷电路板及其上面所有零部件。

|                     |          |
|---------------------|----------|
| 有害物质                | MCV      |
| Pb、Hg、Cr6+、PBB、PBDE | 1000 PPM |
| Cd                  | 100 PPM  |

依照中国《电子信息产品污染控制管理办法》（第 39 号），现标明此产品中可能含有的有毒、有害物质或元素的名称与含量。

- 环保使用期限：本产品环保使用期限请参照贴在机器上的规格标签上的标识。

本指南版权归台达所有，并保有一切权利。版权所有，侵权必究。内容如有变动，恕不另行通知。

