



ENGLISH

InfraSuite EnviroProbe

Installation Guide

About this guide

This guide contains information about installation and operation of the InfraSuite EnviroProbe. These instructions shall be followed during the installation, operation and storage of this product. Failure to heed these instructions and warnings will void the product warranty.

Electromagnetic Interference

This product is EMI class B product and may cause radiointerference in a domestic environment. The user may be required to take adequate measures.

EnviroProbe Overview

The InfraSuite EnviroProbe is able to monitor the temperature, humidity and other conditions in the room environment.

The EnviroProbe offers four digital input connections for external sensor devices that can monitor security status, liquid leakage, fire, smoke, etc. The unit supports either RS232 or RS485 communication mode; via the selection of DIP switch, either mode will start up.

Under RS485 communication mode, up to 10 EnviroProbe units can be cascaded to monitor a larger area of an environment.

Features

- Monitor the temperature and humidity of a room environment.
- Equipped with four digital input connections to connect other external monitoring devices
- Supports RS232 or RS485 communication mode.
- Up to 10 EnviroProbes units cascaded under RS485 communication mode.

Package Contents

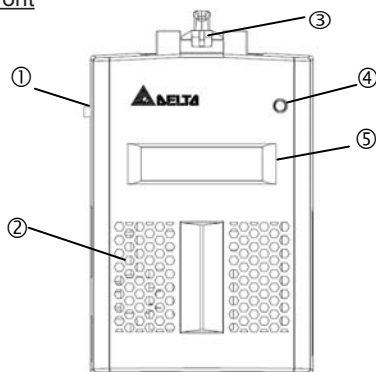
EnviroProbe package should contain the following items:

Quantity	Item
1	EnviroProbe Unit
1	Installation Guide

EnviroProbe Description

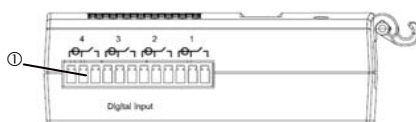
EnviroProbe external components are described below.

Front



#	Item	Description
①	Push Switch	Controls LED Display: Press 0.2 second to turn on backlight for 1 minute. Press 1.0 second for backlight always on. Press 0.2 second for backlight off.
②	Internal Sensors	Temperature and humidity sensors.
③	Installation Hook	Attaches the unit to a rack or other location.
④	System Indicator	Green light when unit is on. Light off when unit fails or has no power. Light flashes during communication.
⑤	LCD Display	Display temperature and humidity.

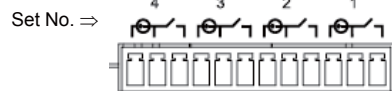
Right Side



#	Item	Description
①	Digital Input	Connect dry contact sensors or wet 5-24V sensors with these four digital inputs. You can set these four digital inputs in wet-contact or dry-contact operation using the Contact DIP switches on the left side of the unit — see below.

Digital Input Pin Descriptions

Refer to the pin descriptions below to connect wet or dry contact sensors accordingly



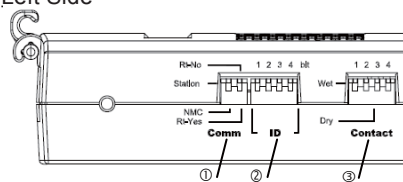
Pin No. ⇒ 1 2 3 4 5 6 7 8 9 10 11 12
Connector Pin Definition

Set No.	4	3	Remark
Pin No.	1 2 3 4	5 6	
Definition	DI DICOM DIGND DI DICOM DIGND		WET contact: DI: Input Voltage(+) DICOM: Input Voltage(-)
Set No.	2	1	
Pin No.	7 8 9 10	11 12	
Definition	DI DICOM DIGND DI DICOM DIGND		DRY contact: Connect DICOM and DIGND with external device.

Alarm Signal Specifications

Wet contact signal
- Alarm voltage 5-24Vdc
- Alarm current 1-8mA

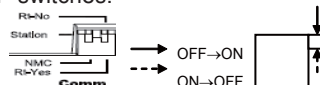
Left Side



#	Item	Description
①	Comm	Use these two DIP switches to select RS485 or RS232 communication mode. See settings below.
②	ID	Use these four DIP switches to set up ID addresses when up to 10 EnviroProbe units are cascaded. See settings below.
③	Contact	Use these four Contact DIP switches to set four digital inputs on the unit's right side in Dry Contact mode or Wet Contact mode. See settings below.

Comm DIP Switch Settings

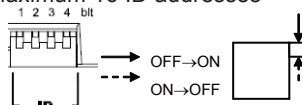
Set the communication mode with these two DIP switches.



SW 1	SW 2	Function Mode
OFF	OFF	Station → RS485
ON	ON	NMC → RS232
	OFF	Remove RS485 110Ω Terminal Resistor.
	ON	Connect RS485 110Ω Terminal Resistor.

ID DIP Switch Settings

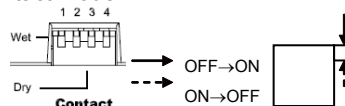
Set maximum 16 ID addresses



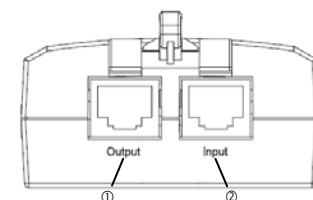
No	Bit 1(Set)	Bit 2(Set)	Bit 3(Set)	Bit 4(Set)	ID Number
1	OFF	OFF	OFF	OFF	0
2	ON	OFF	OFF	OFF	1
3	OFF	ON	OFF	OFF	2
4	ON	ON	OFF	OFF	3
5	OFF	OFF	ON	OFF	4
6	ON	ON	ON	OFF	5
7	OFF	ON	ON	OFF	6
8	ON	ON	ON	OFF	7
9	OFF	OFF	OFF	ON	8
10	ON	ON	OFF	ON	9
11	OFF	ON	OFF	ON	10
12	ON	ON	OFF	ON	11
13	OFF	OFF	ON	ON	12
14	ON	OFF	ON	ON	13
15	OFF	ON	ON	ON	14
16	ON	ON	ON	ON	15

Contact DIP Switch Settings

Set the four digital inputs on the unit's right side in Dry Contact mode or Wet Contact mode.



DIP-Switch	1(set)	2(set)	3(set)	4(set)
OFF	WET Contact			
ON	DRY Contact			



#	Item	Description
①	Input	For cascaded EnviroProbe units, connect the first unit's Input with Delta-BUS port locating at the rear panel of the EnviroStation (CAT-5 straight-through cable is required), and connect other unit's Input with the previous unit's Output.
②	Output	Cascade up to 10 EnviroProbe units only with RJ-45 connector. CAT-5 straight-through cable is required for such connection.

EnviroProbe Installation

Install the EnviroProbe as follows:

1. Find an adequate location that allows you to configure the EnviroProbe and route the cable conveniently. Avoid any location under direct sunlight, or near any heat source, or next to window that might incur inaccurate reading.
2. Hook the EnviroProbe to a rack or attach it to a wall other location using screws or other means such as magnets.
3. Route the cable to the rear panel of the EnviroStation and plug it into the Delta-BUS port.
4. You can cascade up to 10 EnviroProbes with cables running between each device's Input and Output connectors. Note that each EnviroProbe must have a unique address that you can set with the ID DIP Switch—see the description of settings above.

Specifications

INPUT Input voltage	UPS SNMP card: 12Vdc (pin 1 & 4) PDU SNMP card: 5Vdc (pin 2 & 4)
WEIGHT & DIMENSIONS	
Unit Dimensions (H x W x D) Weight (Unit)	30 x 66 x 99 mm 120g (0.264lb)
Package Dimensions (H x W x D) Weight (Unit)	43 x 97 x 110 mm 140g (0.308lb)

ENVIRONMENT	
Temperature Operating Storage Accuracy	0°C ~ 45°C -20°C ~ 60°C +/-1°C @ 15°C~35°C +/-2°C @ 0°C~15°C and 35°C~45°C
Humidity Operating Storage Accuracy	20 ~ 90% RH (Non-condensing) 0 ~ 90% RH (Non-condensing) +/-10% RH
Altitude Operating	0 ~ +10,000 feet
CERTIFICATIONS	
Safety EMI EMS	CE EN55022 (CISPR 22) Class B EN55024 Level 3 @ Air 8Kv./ Contact 4Kv
	— IEC 61000-4-2 (ESD Test) — IEC 61000-4-6 (CS Test)

Warranty

Seller warrants this product, if used in accordance with all applicable instructions, to be free from original defects in material and workmanship for its lifetime. If the product should prove defective in material or workmanship within that period, Seller will repair or replace the product at its sole discretion. This warranty does not apply to normal wear or to damage resulting from accident, misuse, abuse or neglect. Seller makes no express warranties other than the warranty expressly set forth herein. Except to the extent prohibited by applicable law, all implied warranties, including all warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. This warranty expressly excludes all incidental and consequential damages.

WARNING: The individual user should take care to determine prior to use whether this device is suitable, adequate or safe for the use intended. Since individual applications are subject to great variation, the manufacturer makes no representation or warranty as to the suitability or fitness of these devices for any specific application.



简体中文

InfraSuite 监测器

安装指南

使用说明

本安装指南包含InfraSuite EnviroProbe的安装和操作资讯。本指南包含InfraSuite EnviroProbe产品的功能说明、安装、操作以及存储等指导说明，请按照说明操作并妥善保管。未按照要求操作，不享受保修。

电磁干扰

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。

EnviroProbe概述

台达InfraSuite EnviroProbe能够监测温度、湿度以及其他连接於室内环境监测装置。该EnviroProbe提供了4个外部感测器的数位输入介面，能连接如门禁、漏水、火警以及烟雾等监测装置。同时该设备支援RS232或RS485通讯模式，可藉由 DIP开关进行选择。在RS48通讯模式里，级联多达10台的EnviroProbe可用来进行更大面积的环境监控。

特点

- 监测室内环境温度和湿度
- 提供4个输入介面，用来连接其他环境监测装置
- 支援RS232或RS485通讯模式
- 在RS48通讯模式里，可串接最多10台EnviroProbe。

包装清单

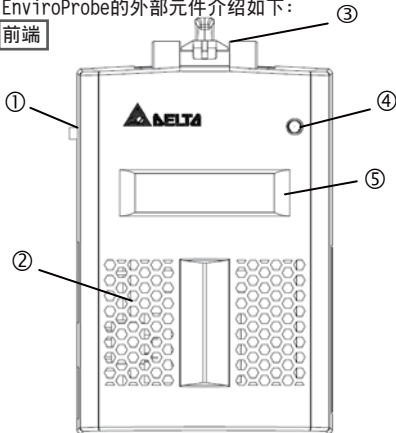
EnviroProbe包装中包含下列项目：

数量	项目
1	EnviroProbe监测器
1	安装指南

EnviroProbe介绍

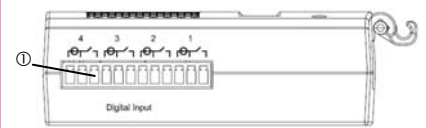
EnviroProbe的外部元件介绍如下：

前端



#	项目	叙述
①	LED 开关	控制LED显示幕背光： 按0.2秒，打开背光1分钟。 按1.0秒，背光常开。 再按0.2秒，背光关闭。
②	内部传感器	温度及湿度感测器
③	安装挂钩	单个挂在机架或方便悬挂的其他位置
④	系统指示灯	正常使用中绿灯常亮， 失效或没有供电时灯熄灭， 当正常通讯时灯闪烁。
⑤	液晶显示屏	显示温度与湿度

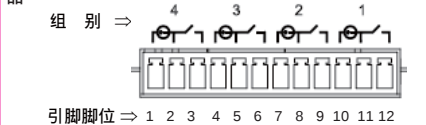
右侧



#	项目	叙述
①	Digital Input (数位输入)	把乾接点感测器或5-24V的湿接点感测器连接至这四个输入介面。您可以透过EnviroProbe左侧的DIP开关(见下文)，来配置这些输入接点的运行方式。

数位输入引脚说明

请参考下面的引脚脚位说明来连接干/湿接点感测器。

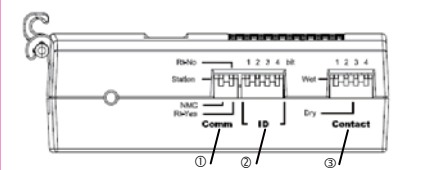


引脚定义							
组别	4			3			备注
引脚脚位	1	2	3	4	5	6	
定义	DI	DICOM	DIGND	DI	DICOM	DIGND	D1：输入电压 (正) D1COM：输入电压 (负)
组别	2			1			乾接点 连接D1COM与DIGND 到外部监测装置
引脚脚位	7	8	9	10	11	12	
定义	DI	DICOM	DIGND	DI	DICOM	DIGND	

警示讯号规格 湿接点讯号

- 警示电压 5-24Vdc
- 警示电流 1-8mA

左侧



#	项目	叙述
①	Comm DIP 通讯DIP	以这两个DIP切换开关来选择RS485或RS232通讯模式，详见以下设置说明。
②	ID位址DIP	当10个 EnviroProbe级联时，用这四个DIP切换开关来配置ID位址。详见以下装置说明。
③	Contact DIP 接点DIP	用这四个DIP切换开关来配置EnviroProbe右侧的四个数位输入介面是干接点输入还是5-24V湿接点输入，详见以下设置说明。

通信DIP切换开关设置

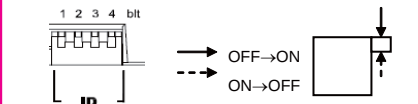
通过这两个DIP切换开关来设置EnviroProbe的通讯模式



开关 1	开关 2	模式
OFF		Station → RS485
ON		NMC → RS232
	OFF	移除 RS485 110Ω 的电阻
	ON	连结 RS485 110Ω 的电阻

ID位址DIP切换开关设置

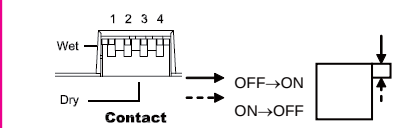
可以设置多达16个ID位址。



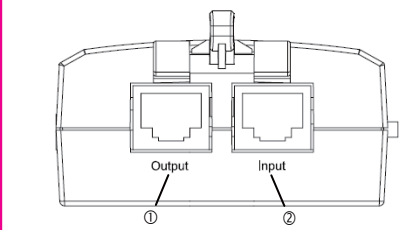
No	Bit 1(Set)	Bit 2(Set)	Bit 3(Set)	Bit 4(Set)	ID Number
1	OFF	OFF	OFF	OFF	0
2	ON	OFF	OFF	OFF	1
3	OFF	ON	OFF	OFF	2
4	ON	ON	OFF	OFF	3
5	OFF	OFF	ON	OFF	4
6	ON	OFF	ON	OFF	5
7	OFF	ON	ON	OFF	6
8	ON	ON	ON	OFF	7
9	OFF	OFF	OFF	ON	8
10	ON	OFF	OFF	ON	9
11	OFF	ON	OFF	ON	10
12	ON	ON	OFF	ON	11
13	OFF	OFF	ON	ON	12
14	ON	OFF	ON	ON	13
15	OFF	ON	ON	ON	14
16	ON	ON	ON	ON	15

接点DIP切换开关设置

用来选择EnviroProbe右侧的四个数位信号输入为干接点输入模式还是5-24V湿接点输入模式。



DIP-Switch	1(set)	2(set)	3(set)	4(set)
OFF	WET Contact (湿接点)			
ON	DRY Contact (干接点)			



#	项目	叙述
①	Input (输入)	若为串连的第一台EnviroProbe，则连接输入介面至EnviroStation背板上的Delta-BUS介面(需使用CAT-5直通电缆)，否则连接至上一台EnviroProbe的输出介面。
②	Output (输出)	通过这种RJ-45连接器可以级联高达10台EnviroProbe。需使用CAT-5直通电缆。

安装EnviroProbe

安装EnviroProbe的步骤如下：

1. 请选择一个方便安装EnviroProbe和走线的位置。避免阳光直射、靠近热源、或接近视窗，否则可能导致读数不准确。
2. 可将EnviroProbe悬挂在一个机架上或用螺钉或其他工具，如磁铁，安装到墙上或其他地方。
3. 将CAT-5直通电缆连接到EnviroStation背板上的Delta-BUS介面。
4. 可以通过每个EnviroProbe的输入和输出介面，上下级联最多10台 EnviroProbe。请注意，每台EnviroProbe只能有一个唯一的ID位址，可以通过ID位址DIP切换开关进行设置，请参考前述的ID位址设置说明。

产品规格

输入 输入电压	UPS SNMP卡： 输入电压为12Vdc (引脚1 & 4) PDU SNMP卡： 输入电压为5Vdc (引脚2 & 4)
重量与尺寸 单机 (台) 尺寸 (长*宽*高) 重量 (台)	30 x 66 x99 (毫米) 120克 (0.264磅)
包装 尺寸 (长*宽*高) 重量 (运送)	43 x 97 x 110 (毫米) 140克 (0.308磅)
环境 温度 运行 存储 精度	0°C ~ 45°C -20°C ~ 60°C +/-1°C @ 15°C/35°C +/-2°C @ 0°C/15°C 和 35°C/45°C
湿度 运行 存储 精度	20 ~ 90% RH (未凝结状态) 0 ~ 90% RH (未凝结状态) +/-10% RH
海拔 运转	0 ~ 3045米
认证 安规 电磁干扰 (EMI) 电磁耐受性 (EMS) - IEC 61000-4-2 (静电放电测试) - IEC 61000-4-6 (CS 测试)	CE EN55022 (CISPR 22) Class B EN55024 Level 3 @ Air 8KV./ Contact 4KV

产品保修

- 在产品保修期限内且使用者依据本安装指南正确使用情况下，卖方保证没有原材料和工艺的缺陷。
- 如果在产品保固期限内，产品出现原材料和工艺的缺陷，卖方有权选择负责修理或更换产品。
- 本保证不适用于正常磨损或由於意外、误用、滥用或疏忽导致的损坏。
- 超过保固期，卖方不提供无偿的维修。未详述在此保固说明的范围，卖方亦不提供保固。
- 本保固说明若遇特殊应用，法令禁止，或含有保障意味的保证，包括销售体系的保证或适用的保证，仍受保固期限的规范。本保证排除所有意外损失及意外後相继发生的任何损失。

★警告：

个人用户使用前需要优先确认，这设备是否合适且能安全的使用。由於个别的应用范围有很大的差异，故制造商对特定的应用不另行做任何规范或保证。