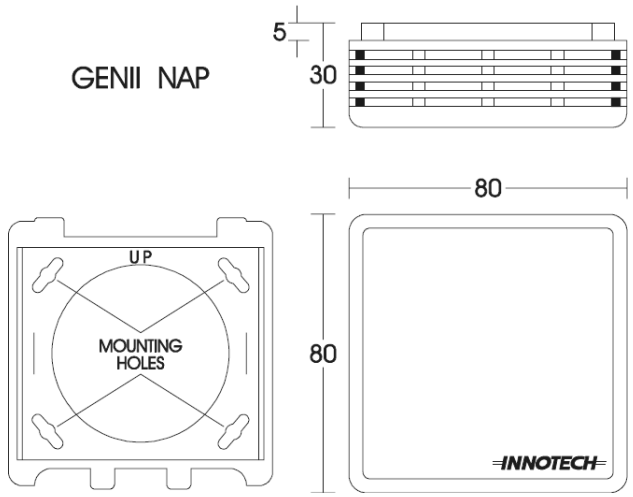
Models:
GENII NAP Network Access Point

GENII NAP
Network Access Point

Overview
The Innotech GENII NAP is a bi-directional multiple protocol converter between RS232 and RS485, and IRDA (Infra-Red Data Association) and RS485. It is intended to act as an intermediate translator between either a computer's serial port or Compaq iPAQ Pocket PC's IRDA port and an Innotech controller network.



Features
- Fully isolated RS485 communications
- Supports both the Innotech Genesis and Maxim family of controllers
- Operates on 24VAC
- Provides a 10K thermistor in the same enclosure
- All wire connections by removable terminals
- LED indication of network traffic
- Baud rate selection of 9600 and 57600

Approvals
The Innotech GENII NAP conforms to the requirements per European Consortium Standards EN55022:1998 (Emissions), Class B, Group 1, EN50024:1998, EN61000-4-2 (Electrostatic Discharge), EN61000-4-3 (Radiated RF Immunity), ENV50204 (Radiated RF Immunity-Keyed Carrier), EN61000-4-4 (Electrically Fast Transients 1kV), EN61000-4-5 (Surge), EN61000-4-6 (Conducted RF Immunity), ICE1000-4-11 (Mains Variations) for purposes of CE certification and also the requirements of the Australian/New Zealand standard AS/NZS 2064 1/2:1992 Class B Group 1 for purposes of C-Tick certification.

Applications
The Innotech GENII NAP converts both RS232 and IRDA signals to the RS485 format. It is designed to work with a Computer for a RS232 connection or a Compaq iPAQ Pocket PC for an IRDA connection. In this way it can be used to access an Innotech controller network using either a computer or a hand held Compaq iPAQ Pocket PC.

A 10kΩ thermistor is also situated in the enclosure. This may be used as a remote temperature sensor by a controller, as part of an Innotech controller network. Isolated RS485 circuitry prevents voltage irregularities on the communication cabling from damaging the GENII NAP or a computer, and reduces the likelihood of communication errors.

The Innotech GENII NAP is design as a permanently situated protocol translator.

Specifications

Power Supply

Voltage: 24 Volts ± 10 % @ 50/60 Hz

Terminal Identification

1	24VAC +
2	0VAC
3	GND
4	Thermistor 1
5	Thermistor 2
6	RS485 +
7	RS485 –
8	RS485 Shield

Temperature Ratings

Storage	0 to 50°C non-condensing.
Operating	0 to 40°C non-condensing.

Enclosure

The Innotech GENII NAP is enclosed in a standard Innotech sensor wall enclosure. It is intended to be mounted on a wall at approximately eye level. The cables should feed back into the wall cavity and to be connected to the Innotech controller network.

Functionality

The Innotech GENII NAP communications channel is activated by receiving data either via the RS232 or IRDA ports. This data is then translated and transmitted on the RS485 network. Any data received on the RS485 network is converted to RS232 or IRDA protocols for the Computer or Pocket PC. Only one of the available RS232 or IRDA channels can be used at a time.

Installation

1. Mount the base to the wall with four screws through the holes provided in the base of the case.


Ensure that the word “UP” is to the top.

2. Wire in accordance with INNOTECH connection diagrams and local bylaws or refer to your local distributor.
3. Seal the hole in the wall after wiring to prevent errors in the measured temperature.
4. Fit the cover by placing the top edge of the cover over the tabs on the top of the base and then pressing the bottom middle of the cover to the wall. A firm click indicates that the cover is securely fixed.

Wiring

Comms

- The cable used for RS485 Comms must be shielded single twisted pair, 120 ohms characteristic impedance, 36 to 45 pF capacitance per metre between conductors.
- The Comms cable must be organised as a bus topology. That is, starting at one end, devices are connected to it until the other end of the cable is reached. No “stubs” are allowed. To connect a device to the cable, a cut is made in the cable at the point where the device is to be situated. Then, the two new ends of the cable are wired into the device. The shields from the two new ends are then terminated into the terminals marked SHLD1 and SHLD2.
- Refer to the Genesis Network Installation Instructions for more information.
- An RJ45 plug and cable and an RJ45-to-DB9 adaptor (such as the Maxim Programmer Cable) is required to connect the NAP’s RS232 Port to a PC Serial Port.

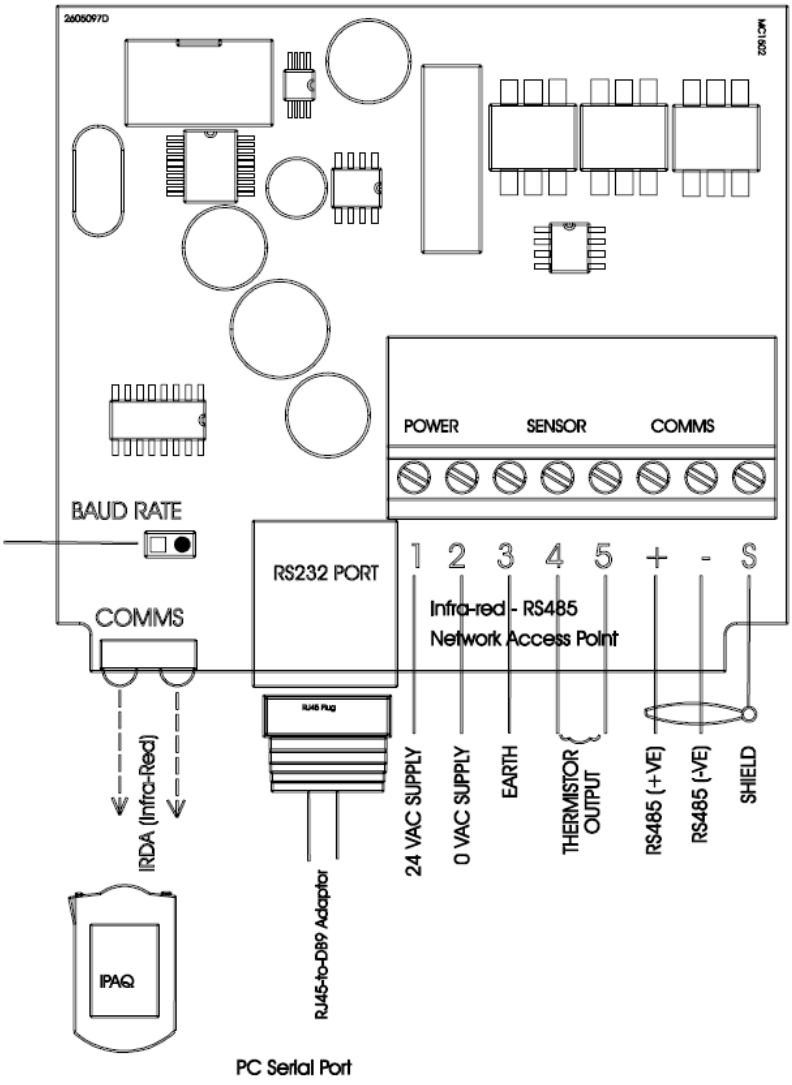
Detector

For most installations twisted pair cable will be adequate provided that it is not run in the same conduit as power cables. It is good practice to maintain at least 50 millimetre clearance between detector wiring and power wiring. Shielded Cable should be used where there are high levels of EMI (electro-magnetic interference). The shield should remain continuous from the detector to terminal 9 of the controller.

BAUD RATE SETTING

9600 BAUD RATE- JUMPER OFF

57600 BAUD RATE- JUMPER ON



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