Models:
GENII MPI ISOL

GENII MPI ISOL
Modem and Printer Interface with
Isolated RS485 Comms

Overview
The Innotech GENII MPI ISOL Modem Printer Interface with Isolated RS485 comms is a Network device that acts as an electrically isolated gateway into a Network of Innotech Digital Controllers from a PC on the same LAN or from a remote location via a modem.

Features
- Programmable via the *Gen2Config* and *MaxCon* software packages to meet the varying needs of any installation.
- Monitors the "Global Comms" for Alarms, and initiates a dial out via the modem to remote locations designated in the dialing list.
- Monitors the "Global Comms" for system values and variables designated for printout to the printer.
- Provides control of the modem to allow dial in from a remote location.
- Allows *Gen2* and *Maxim* programs to access any Innotech device on the "Net Comms" channel.
- Permits direct Alarm reporting to a pager system via modem.
- Permits direct Alert reporting to a digital phone with short message service (SMS) facility.
- Supports fax out using a Class II modem.
- Supports *Alert* software on local or remote PC for alarm reporting.
- LED indication of *GENII MPI ISOL* mode.
- LED indication of COMMS activity.
- Service Mode to prevent alarm dial outs during system maintenance.
- Alarm acknowledge to reset alarm output relay.
- Mode selection allows PC to use modem for other functions.
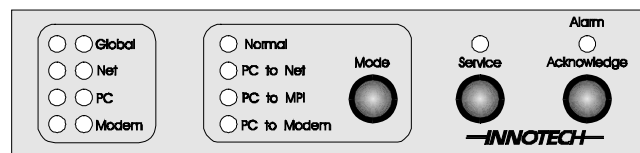- Isolated RS485 connection to prevent problems with earth loops and faults.

Hardware
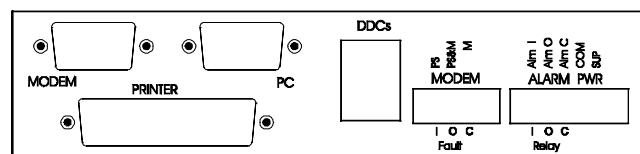### Supplied
- *GENII MPI ISOL*
- Gen2 DATA cable for connection to PC
- RJ12 COMMS socket and 3 metre lead for connection to "Global" and "Net" COMMS.

Supported
- Full "HAYES" compatible modem with minimum 9600 Baud
- Any ASCII compatible printer with a parallel port, and the capability to print line by line without ejecting the paper
- Typically dot matrix and inkjet printers meet this requirement, whereas laser printers do not

FRONT PANEL

BACK PANEL

Applications
- Gateway into a Network from a remote location
- Gateway out from an Innotech Digital Controller on the Network to remote service providers for alarm notification
- Local centralised point for alarm notification
- Local centralised point for alarm printout and hard copy recording to its local printer of any data broadcast as a "Global COMMS" by any Innotech Digital Controller on the Network

Approvals
The GENII MPI ISOL conforms to:
- Electromagnetic emission and immunity requirements according to standards EN55011 (CISPR11) for RCM Labelling.

Battery
Contains a Lithium Type Battery, Dispose of Properly.
(In accordance with local regulations)

⚠ Caution: Risk of explosion if battery is replaced by an incorrect type.

Specifications

Power Supply

Voltage: 16VAC ± 10% 4VA 50/60Hz OR
24VDC ± 10% 150mA

The operating voltage must meet the requirements of Safety Extra Low Voltage (SELV) to EN60730. The transformer used must be a Class 2 safety transformer that has the energy and voltage limiting characteristics as described in the National Electrical Code, ANSI/NFPA70. It must also be sized and fused in compliance with local safety regulations.

Temperature Ratings

Storage: 0 to 50°C non-condensing
Operating: 0 to 50°C non-condensing

Input/Output

- RS232 Serial link to a Modem via a male DB9 plug.
- RS232 Serial link to a PC via a female DB9 plug.
- Parallel Printer port via a female DB25 plug.
- Isolated RS485 "Net COMMS" and "Global COMMS" via RJ12 plug (RJ12 plug + 3 metre lead supplied).

Relay Outputs

- Alarm activated relay
- Modem fault relay

GENII MPI ISOL

Comms Terminals Identification

RJ12 Socket	Comms Pin No.	RS485 Interface Comms Terminals
1	Positive of "Global Comms"	G+
2	Negative of "Global Comms"	G-
3	Common of "Global Comms"	Shield
4	Common of "Net Comms"	Shield
5	Positive of "Net Comms"	N+
6	Negative of "Net Comms"	N-

Terminal Identification

Alarm Relay and GENII MPI ISOL Power

Alm I   Normally Closed contact of Alarm relay.
Alm O   Normally Open contact of Alarm relay.
Alm C   Common contact of Alarm relay.
COM   0V or Common of MPI power supply.
SUP   16 VAC or 24VDC of MPI power supply.

Modem Fault Relay

PS   "Live" side of Modem power supply.
PS & M   Common for Modem and Modem power supply.
M   Relay switched supply to Modem.

Installation

- **ⓘ** <u>DO NOT</u> locate the *GENII MPI ISOL* inside a switch board as this will violate Austel regulations. This is especially important when it is connected to a modem on the public telephone network.
- Place the *GENII MPI ISOL* in a dry and clean location free of vibration.

Wiring

- Connect the 16VAC or 24VDC plug pack supply to the correct terminals, observing the correct polarity of the connections (COM-, SUP+).

ⓘ COM does not need to be earthed if using the double insulated plug pack supplied.

- Connect the RS485 COMMS to the GENII MPI ISOL via the RJ12 socket on the rear panel, using the cable supplied.
- If required connect a printer to the GENII MPI ISOL via the DB25 parallel printer port on the rear panel.
- Isolated RS485: Both the Global and Net COMMS connections are through an isolation device which stops any current flow through the screen because of earth loops or a fault which causes a change in earth voltage.
- Refer to Installation Guide and Innotech Network Cabling Manual DS 99.04.

FCC Class A Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

Note – This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Modifications to this device, may void the authority granted to the user by the FCC to operate this equipment.