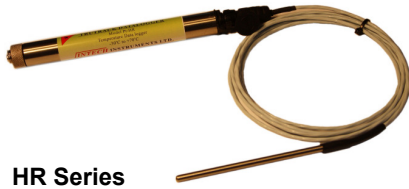
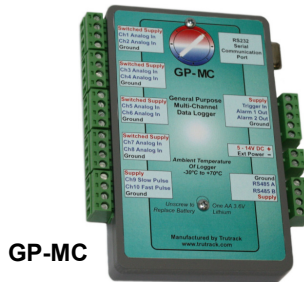


# Data Logger Connections

**Flexible connection options via OmniLog data management software include: USB, RS232, Ethernet, Modem (Landline, GSM & Radio), Palm.**



HR Series



GP-MC

LCD Series

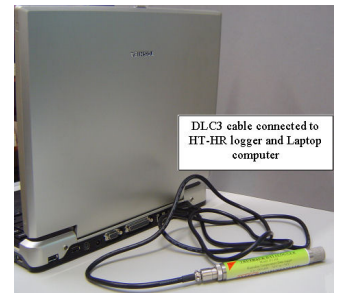


## USB:

By popular demand, TruTrack data loggers can now connect via a USB port using the new USB download cable! Once setup, OmniLog will automatically detect and connect to loggers using the USB connection.  
 Note: Must be using OmniLog V1.58 or greater.

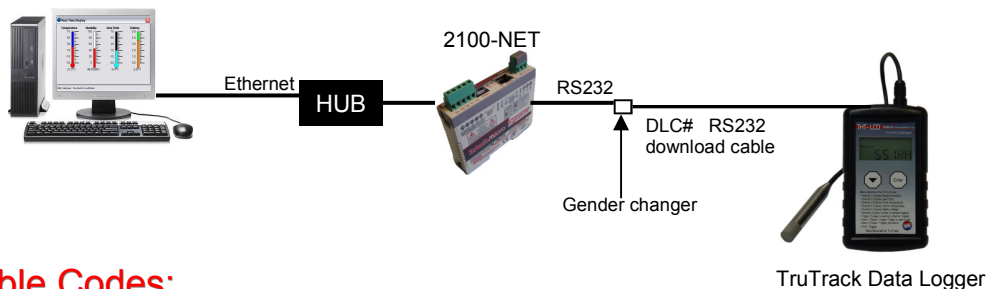
## RS232:

The tried and tested RS232 serial cable can be used for direct connection to a PC (via an RS232 port); or in conjunction with the connection methods following. The RS232 download cable can also connect to a USB port via a USB to Serial converter.



## Ethernet:

Connection to a TruTrack data logger across a local area network (LAN) or wide area network (WAN) is possible using the Intech Micro 2100-Net Ethernet to Serial converter. This allows for continuous monitoring over distances limited only by the extent of the network!  
 Note: OmniLog can only connect to a single TruTrack data logger across the network.



## Download Cable Codes:

Logger Type:	HR Series	LCD Series	GP-MC
USB cable code:	DLC3USB	DLC8USB	DLC5USB
RS232 cable code:	DLC3	DLC8	DLC5

DLCA = Adaptor needed when using Modem or Palm connection methods.

### Notes:

- Download cables are 2m long.
- RS232 cannot exceed 15m.
- USB cannot exceed 5m.



# Data Logger Connections

## Landline Modem:

The TruTrack loggers can use modem links both for general communications with a computer and to send SMS messages when alarm conditions occur. A special modem adaptor is required between the logger download cable and the modem (DLCA).

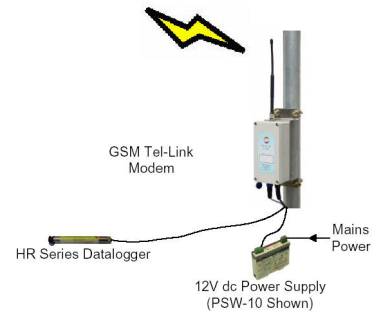
Intech Instruments Ltd recommends the use of external hardware modems at both ends of the connection (I.e. not just the remote modem), as these are far more robust than internal software modems, especially under 'noisy' line conditions.



## GSM Modem:

The TruTrack GSM Tel-Link Modem is a pole mounted, fully weatherproof (IP66), GSM Cellular Telemetry system used to access Logger data across the GSM Cellular network.

Intech Instruments Ltd recommends the use of GSM Modems at both ends of the connection (I.e. PC running OmniLog & remote logger).



## Radio Modem:

The Tel-Link Radio Modems are powered by FCC and ETSI approved MaxStream radio modules with frequency hopping spread spectrum capability.

Radio Modems are available for either the 2.4GHz or 900MHz license-free ISM bands:

- 900MHz modules certified for use in USA, Canada, New Zealand and Australia.
- 2.4GHz modules certified for use in USA, Canada, Europe, New Zealand and Australia.

### Performance:

- Indoor Urban;  
900MHz Band - Up to 450m  
2.4GHz ISM Band - Up to 180m

### Outdoor Line Of Sight:

#### Ideal\* Conditions:

- with Dipole;  
900MHZ ISM BAND - Up to 10km  
2.4GHz ISM Band - Up to 5km

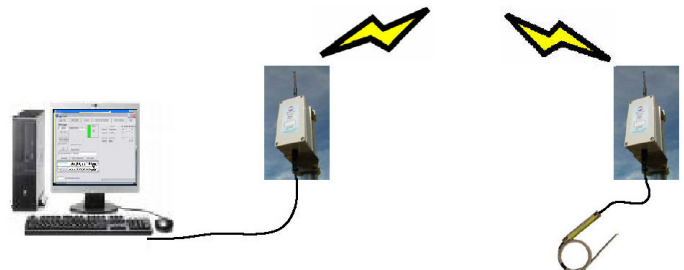
- High Gain Antenna;  
900MHZ ISM BAND - Up to 30km  
2.4GHz ISM Band - Up to 15km

#### Normal\* Conditions:

- with Dipole;  
900MHZ ISM BAND - Up to 3km  
2.4GHz ISM Band - Up to 1.5km

- High Gain Antenna;  
900MHZ ISM BAND - Up to 6km  
2.4GHz ISM Band - Up to 3km

Note \* Ideal Conditions = Hill top to Hill top.  
Normal Conditions = on 3 meter pole with line of sight and no surrounding trees and buildings.

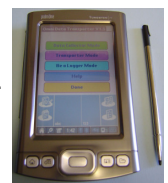


## PALM:

A Palm PDA can be used to collect data from loggers out in the field, then connect the palm to the computer to download the data. Connecting the Palm to the RS232 serial port of the computer or the logger requires the use of a DLCA adaptor (which end depends on the Palm serial cable used). A DLC# cable is also required to download the data from the loggers in the field.

The logger(s) must first be set-up using a direct cable connection on the PC running OmniLog.

**Note:** OmniLog software is unable to detect a Palm connected via USB unless through a serial adaptor (otherwise must use an RS232 port). Some Palm types will require the purchase of a third party serial cable.



Phone: **1-800-49-VESPO** or **1-239-348-8086**  
Fax: **1-800-36-VESPO** or **1-239-348-9910**

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