

# DataVision Premier Logger

**Rugged Aluminium body**  
with hand-grips

**6 sensor inputs**  
(any combination of Analog or Digital)



**USB & RS232 outputs**  
(use with older or new computers)

**Hi-Contrast Colour LCD Display**

**Splashproof Keyboard**

**Data collection, display & analysis** without a computer.

The DataVision series of loggers represents the finest dataloggers available to education to date. This instrument combines the functions of:

- **Meter** (realtime display of measured parameters. Just like your lab. meters)
- **Datalogger** (save measurements to memory for later analysis)
- **Interface** (connect to a computer to download readings or log via the computer)
- **Analysis system** (interpret the data using the LCD display (no computer required). Great for field work)

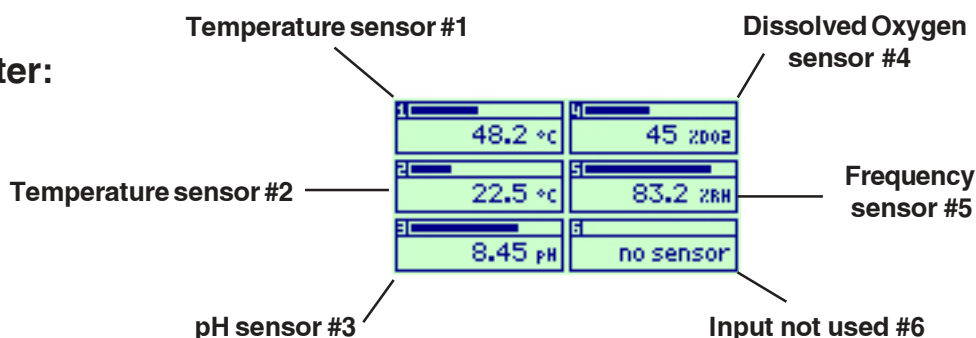
Like the DataMeter and Explorer loggers, the use and operation of the DataVision is simple and intuitive. This ensures that the system can be used immediately by students and teachers alike, without lots of training.

## How it works:

The datalogger system consists of the main unit (the DataVision) and the sensors. You choose what sensor is required for the specific experiment you require (i.e. a pH sensor when doing titrations; a Movement & Position sensor when investigating pendulums, etc; and so on) The DataVision uses sensors which are automatically identified and calibrated so simply plug the sensor into the logger and you are ready to go! (see the Sensors & Accessories page for details).

## Functions:

Using the DataVision as a **Meter**:

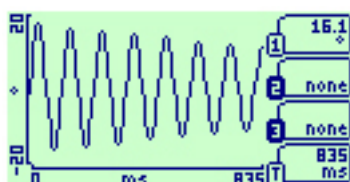


as a **Logger/Analyser**:

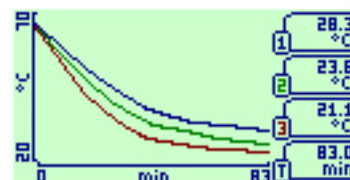
T	µs	1	m/s	2	3	4	°C	5	2002	6
120	0.15						23.8	55.3		
140	0.08						23.8	55.2		
160	-0.03						23.8	55.2		
180	-0.06						23.9	55.2		
200	-1.07						23.9	55.2		
220	-1.10						23.9	55.2		
240	-1.14						23.9	55.1		
260	-1.30						23.8	55.1		

Data Tables

Temperature sensor #2



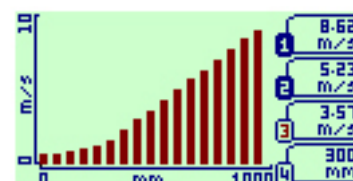
Simple Harmonic Motion experiment (pendulum)



Colour screen highlights different sensors



Zoom in during analysis



Direct measurement of timing, speed & acceleration

## Analysis on the spot assists:

- Faster experiments
- Quicker understanding of what is happening
- Fewer "botched" experiments (immediate data analysis ensures that the experiment was done correctly)

# Easy to understand



Sensor status

Oscilloscope mode (CX version only)

Open a file

Autologging

Set up logging

Snapshot logging

Meter display

**ALSO:**  
Frequency (CX version only)  
Timing

## Logging choices:

In the specific logging mode you can choose:

**Snapshot Logging** : Press the  key to log a reading (i.e.a light level)

**Auto Logging** : Press the  key to begin continuous logging (stopped only when

the  key is pressed.Start logging when the experiment is ready)

**General logging** : Set up the logger to record specific data at specific intervals



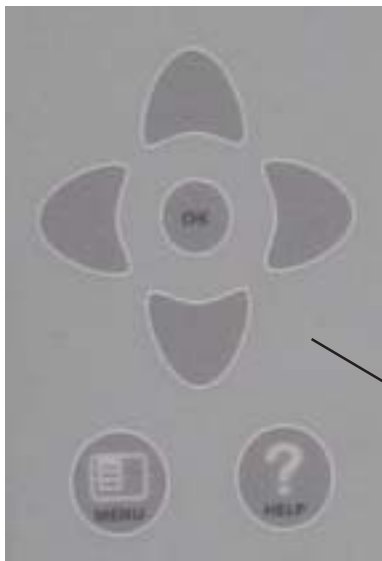
TOOLS menu

## On board HELP



## Intuitive operation

The designers of these world-class loggers take great pride in ensuring that these instruments are as easy and intuitive to use as they can be. After all, more time to learn about the logger takes valuable time away from the experiments!



Navigation & OK

Main MENU HELP menu



OFF or NO or BACK

OK / YES



Select SENSOR, Functions & INPUT data

## Features:

- Automatic identification of sensors & calibration of sensor SI measurement units
- High contrast colour LCD display
- Robust durable construction (aluminium body)
- Any mix of 6 sensor inputs (Analog or Digital)
- On-screen help & standard experiment guide in-built
- Oscilloscope mode with 10us per division (CX version)
- Experiment duration from 100us to 3 months
- Up to 50 datafiles can be stored inside
- Direct measurement and display of speed and acceleration using light gates (1us timing resolution)
- Data shown as graph or table
- Link to a computer for web publishing, further analysis or printing

## Other features:



### Robust sensor connections

not fragile Mini-DIN connectors which are more prone to damage with constant handling.

As the DataVision was designed by engineers, reliability was a key factor in the construction. The use of full-size, DIN connectors ensures better reliability/robustness of the sensors when regularly connected/disconnected by students.



### 6 sensor inputs

Note that any input can be used with an Analog or Digital sensor

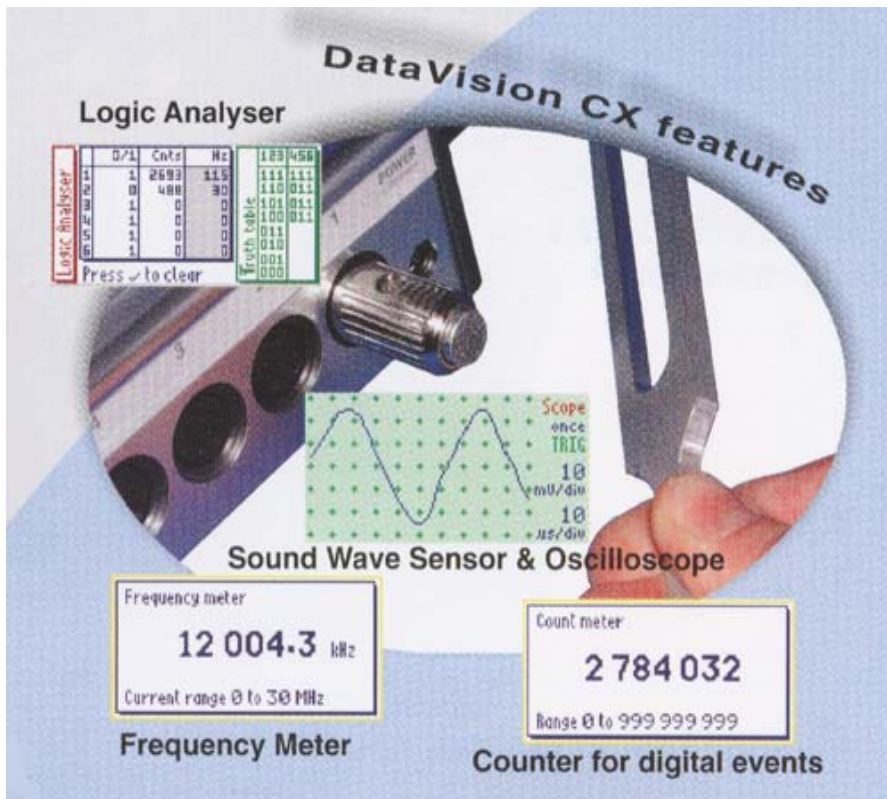
### Charger/Power

Recharge the internal batteries or run the DataVision with an adapter

### Serial & USB connection

No problems connecting to new or old computers





## DataVision CX

Not just a datalogger

- Oscilloscope
- Frequency Meter
- Digital Counter
- Logic Analyser

Features	CX	BX
Sensor inputs	6	
Interface	USB & serial	
Bluetooth ready	YES	
Oscilloscope	YES	NO
Frequency Meter	YES	NO
Digital Counter	YES	NO
Logic Analyser	YES	NO
An/Dig sensors	YES	
Speed/Accel. on screen	YES	
Log Frequency Count Period		
Graphs/Tables		
Meter		
Max readings per file		
Timing Res.	1us	8us
Analog Res.		

### DataVision CX/BX comparison:

## DataVision CX & BX:

Available in the following configurations:

D100380	<b>DataVision BX only</b> DataVision BX colour data logger, Carry case, Instructions, mains adaptor
D100385	<b>DataVision BX Value Pack</b> DataVision BX colour data logger, HiTemp temperature & General Light level sensors, USB cable, Carry case, UK Mains adaptor, LogIT Lab DV single user software.
D100350	<b>DataVision CX only</b> DataVision CX colour data logger, Carry case, Instructions, mains adaptor
D100355	<b>DataVision CX Starter Pack</b> DataVision CX colour data logger, Carry case, Instructions, mains adaptor, USB cable, HiTemp temperature sensor, General Light level sensor, LogIT Lab DV single user software
D100157	<b>Sound Wave Sensor</b> Detects & displays sound waves on DataVision CX. <i>(Not compatible with BX)</i> Instructions & resources included
D107010	<b>LogIT AirLink 100 Adaptor</b> Plug in module allowing BLUETOOTH operation for DataVision BX & CX

# DataMeter

Secondary School,  
University, Industry

**3 sensor inputs**  
(any Analog or Digital)

**Serial output**  
USB connection with adapter

**2 line LCD  
Display**

**Splashproof  
Keyboard**

**Simple 3 button  
operation**

**STOP GO**  
**NEXT/MENU**



## Logger, Meter, Interface

The DataMeter is a simple to use, quality datalogger for senior schools. This instrument combines the functions of datalogging, meter, real-time computer display & control interface in one unit. Operation is as simple and as easy as it gets with portable multi-function loggers.

### Specifications:

- Data memory : Up to 1500 readings per sensor
- Display : High contrast 32 character LCD display
- Digital capture speed : Max 64us for all 3 sensors
- Sensors : Auto. identifying, Auto. calibration of units
- Size : 155 x 93 x 33mm
- Data sets : Up to 4 sets of data can be stored
- Logging speed : 10ms 3 sensors / 2ms 1 sensor
- Communication : RS232 serial connection
- Battery : Built-in NiMH rechargeable
- Weight : 250g

# VOYAGER either **USB** or **Bluetooth**



## 3 sensor inputs

(Choose any from over 50 sensors )

## USB output (or Bluetooth)

## 2 line LCD Display

## Splashproof Keyboard

## Simple 3 button operation

**STOP**    **GO**  
**NEXT/MENU**

Secondary School,  
University, Industry

## Logger, Meter, Interface

Based on the highly successful Explorer for Primary schools, the **NEW VOYAGER** employs advanced technology to meet the demands of datalogging in secondary science. True to form, the **VOYAGER** is simple to use and affordably priced.

### Specifications:

- Connection: USB (Voyager) Bluetooth (Voyager Air)
- Display : High contrast 32 character LCD display
- Oscilloscope mode and fast data capture
- Sensors : Auto. identifying, Auto. calibration of units
- Size : 78 x 162 x 42mm
- Data sets : Up to 4 sets of data can be stored
- Record up to 12000 readings
- Autolog from 1 second to 91 days
- Power: 4 x AA batteries or USB when connected
- Weight : 144g (without batteries)

# Computer based logging

Utilizes computer USB port

Low cost & very flexible

Choose from over 50 sensors

## eXperiment!

Logging has never been easier or more affordable. **eXperiment** simply plugs into your computer's USB port to allow logging directly onto your computer using any of the 50+ sensors.

Simpler for students to handle, less to break and with plug & play connectivity, immediate logging. No batteries required.

Set includes: Light level sensor ; USB cable/interface ; Interactive multimedia & logging software



## New *Black Box* data recorder interface



### 3 sensor inputs

(Choose any from over 50 sensors )

### USB connection

### Oscilloscope Mode

The new big brother to **eXperiment**. Simply plugs into your computer's USB port to allow logging directly onto your computer using any of the 50+ sensors. No batteries required, ready to go.

Also offers a unique live oscilloscope feature and lets you see events such as Sound Waves on your computer screen.

Set includes: Black Box ; 2 sensors ; Software & experiment guide

# Sensors

## Automatic Identification & SI Unit Calibration

### Temperature and Light sensing

- D100089 HiTemp Temperature sensor Basic General purpose wire type (-10 to +110°C max) as in LogIT packs
- D100047 ProTemp temperature sensor Robust stainless steel probe for chemistry, soil temp etc (-30 to +130°C)
- D100098 ProTemp & moulded extension Robust temperature probe (-30 to +130°C) + moulded sensor extension cable
- D100067 K-Type Thermocouple adapter For use with any standard K-type thermocouple -50 to +1200°C range
- D100088 General Light Level sensor Basic light sensor as supplied in LogIT packs for general use
- D100044 Light Level sensor with lens With lens system & coloured filter set for optics & general use
- D100073 LUX sensor Wide range of 0-25000 LUX with eye response filter for ambient light studies
- D100095 SPX LUX Sensor Designed for monitoring changes of outdoor natural light (0-100,000 LUX)
- D100158 Ultraviolet light sensor UVA & UVB radiation - to show effectiveness of sunglasses, sunblock etc.

### Voltage, Current, Movement and Timing

- D100079 Magnetic Field sensor Flexible probe for electro-field experiments +/- 90mT range
- D100045 Voltage Measurement set Range -25 to +25V dc complete with cable & set of probes & clips
- D100068 Current Measurement probe Range of -1 to +1A dc complete with cable and set of probes & clips
- D100081 100mV signal adapter Adapter containing amplifier for +/- 100mV range
- D100059 Movement & position sensor Angular low friction movement for pendulum, plant growth etc
- D100091 Ultrasonic Ranger sensor Ultrasonic position and speed of sound sensor for physics & maths
- D100042 Linear Accelerometer Solid state accelerometer which measures horizontal or vertical acceleration.
- D100156 Force Sensor Designed for multi purpose Physics dynamics investigations and demos
- D100054 Light Gate set Pair of Light gates for Time, acceleration & velocity experiments
- D100090 Single Light Gate One Light gate for Timing experiments
- D100094 Pressure mat set Set of 2 Pressure mats for timing races, exercise etc
- D100048 Light Switch sensor New design with integral light guide to make wide light gate etc
- D100055 Infra Red Source Focussed IR Light source for Light switch above
- D100052 Reflective Light Switch Suitable for optical tachometry or timing/counting close objects
- D100050 Start/Mark Switch Hand held button- use with extension cable to remotely mark events
- D100049 Push Switch Small push button - can be used to trigger and time events
- D100051 Magnetic Switch Supplied with small magnet to detect, count & time passing objects

### Heart Monitoring

- D100057 Wireless Heart Receiver Works with POLAR Pulse transmitters for rate display (not LIVE compatible)
- D100092 Pulse Monitor Intelligent pulse monitor for rate & waveform - clips on stationary ear or finger

### Electrochemistry, Air Pressure and Environmental Sensing

- D100060 Sound Level sensor Measures sound level calibrated 50-100dBA
- D100157 Sound Wave Sensor Display & records Sound Waveforms - for new LogIT DataVision CX only
- D100056 pH amplifier Compact pH amplifier with BNC socket for standard pH electrodes
- D100112 pH electrode High Quality pH electrode with BNC plug & cable for use with pH amplifiers
- D100113 Coax to BNC adapter To enable pH electrodes with coaxial plugs to work with pH adapter
- D100086 pH electrode & amplifier pack Complete set with pH electrode, cable and amplifier
- D100096 Adjustable pH Amplifier For pH work requiring high accuracy - calibrates most standard pH electrodes
- D100097 Adjust. pH Amp & Electrode Complete set with pH electrode, cable and adjustable amplifier
- D100135 Submersible DO2 probe set New design probe which needs no battery and easy setting up
- D100107 Spare membrane set With 3 membranes and KCl solution for Submersible DO2 set
- D100083 Conductivity probe set Liquid Conductivity set with probe and adapter
- D100082 ION/ORP Redox adapter For connecting standard Redox potential (ORP) electrodes to LogIT
- D100142 Ammonium electrode High quality solid state ion selective electrode for use with REDOX adapter NEW
- D100141 Bromide electrode High quality solid state ion selective electrode for use with REDOX adapter NEW
- D100143 Calcium electrode High quality solid state ion selective electrode for use with REDOX adapter NEW
- D100144 Chloride electrode High quality solid state ion selective electrode for use with REDOX adapter NEW
- D100145 Flouride electrode High quality solid state ion selective electrode for use with REDOX adapter NEW
- D100146 Nitrate electrode High quality solid state ion selective electrode for use with REDOX adapter NEW
- D100147 Sulphide electrode High quality solid state ion selective electrode for use with REDOX adapter NEW
- D100150 Colorimeter Easy to use Colorimeter using three colour LED and powered from LogIT NEW
- D100077 HumiPro Sensor Professional Humidity sensor for fast response and high accuracy
- D100069 Humidity Sensor Standard Humidity sensor for general indication of relative humidity
- D100040 Radioactivity Probe Radioactivity sensor to measure the intensity of alpha, beta & gamma sources
- D100080 Air Pressure Sensor For measuring absolute air pressure in general lab experiments
- D100041 Barometric Air Pressure Designed for barometric measurements - range 800-1100 Bar
- D100061 Weather Station adapter set For Davis Weather Stations: Temperature, Wind speed & direction
- D100110 Stream Flow sensor Sensor Flow in rivers & streams; includes 1metre wading rod (not LIVE compatible)

### Sensor Packages

- D100093 LogIT Range Accessory pack Sound level, HiTemp, 2 Light switches, extension lead, Control LED

## Dataloggers

### Connecting Balances and other equipment

D100084	Balance adapter	Connects most balances with RS232 output to LogIT sensor input
D100058	Designer sensor set	Analogue 0-2.5V and Digital adapters
D100046	1 volt sensor adapter	For connecting other 1 volt sensors (eg PH Blue box, Unilab etc)
D100066	Instrument adapter	To connect instruments and sensors with 0-2.5V dc output range
D100076	4-20mA Current loop adapter	For connecting Instruments with current loop outputs to LogIT

### SENSOR CABLES AND ACCESSORIES

D100131	Sensor extension lead 1 Professional	1 metre long with repairable metal cased connectors
D100132	Sensor extension lead 2 Professional	3 metre long with repairable metal cased connectors
D100133	Sensor extension lead 3 Economy	1 metre long with moulded connectors - non-repairable
D100115	Sensor Mounting set	Set of 6 sensor mounting clips with screws for fixing sensors

### GENERAL ACCESSORIES

D100074	CheckIT display module	Clip on display for LogIT SL or LIVE to show sensor readings etc
D100136	LogIT Multi-Charger set	charger set Convenient way to charge up to 5 DataMeters using one power unit (included) <b>NEW</b>
D100375	LogIT DataVision Power Pack A	High Power UK AC Mains Adapter/Charger for LogIT DataVision CX only <b>NEW</b>
D100038	LogIT SL Charge Pack	Dual battery charger & 1 Rechargeable battery for LogIT SL/LIVE
D100053	LogIT SL/LIVE Leather case	High quality leather case to fit LogIT SL or LIVE with belt clip and velcro covers
D100117	LogIT/LIVE carry case only	Spare carry case as supplied with LogIT SL / LIVE packs - including foam
D100118	DataMeter carrying case only	Spare carry case as supplied with DataMeter packs -including foam
D100119	FIVE SL/LIVE carry case	Spare carry case for 5 LIVE's or LogIT SL and sensors - including foam
D100370	DataVision/SensorLink carry case	Spare carry case for DataVision/SensorLink and sensors - including foams <b>NEW</b>

### TEACHING RESOURCES AND SUPPORT MATERIALS

D103020	eXperiment Resources only eXperiment!	Resource CD Site license CD of eXperiment! multimedia resource (see front page) <b>NEW</b>
D105165	Explorer Interactive - SITE Junior Science experiment	Multimedia Resource CD for Windows-Site license <b>NEW</b>
D100211	DataLogging Guide	Ideas for Datalogging The basics of datalogging; includes Primary and Secondary investigations
D100200	Teaching support file	Comprehensive guide written by teachers and the LogIT designers
D100203	IT in Secondary Science Book	Compendium of IT ideas for Secondary Science by Roger Frost
D100202	IT in Primary Science Book	Compendium of IT ideas for Primary Science by Roger Frost
D100204	DataLogging and Control Book	Comprehensive resource on datalogging and control technology
D100208	DataLogging in Practice book	Comprehensive book to help incorporate DataLogging in education

### AIRLINK WIRELESS CONNECTIVITY

**LogIT Airlink wireless connectivity is suitable for LogIT SL, DataMeter 1000, DataVision CX/BX, & Serial Explorer**

D107010	AirLink 100 Adaptor	LogIT Airlink 100 Adaptor Adds Bluetooth® Class 1 wireless connectivity to most LogITserial dataloggers
D107015	AirLink Set	LogIT AirLink Set LogIT Airlink 100 adaptor & Class 1 Computer Bluetooth® USB adaptor
D107020	Computer Bluetooth® Adaptor	Adds Bluetooth® Class 1 functionality to most USB equipped computers

### CABLES TO LINK COMPUTERS TO ANY LOGIT (software on next page)

D100120	license LogIT Serial to USB Link Cable	Connects a serial LogIT datalogger to USB port:PC (Win98SE+) or Mac (OS9+) Compatible with LogIT Lab 32bit, Insight 3/4 or Junior Insight software 3/4
D100124	IBM PC/Acorn serial link cable	For standard 9pin PC or Acorn serial COM socket (for 25 way see adapter)
D100128	PC cable to LogIT adapter	Adapts palmtop PC cable for LogIT use (eg PsiWin, CE computer etc)
D100138	USB A-B cable replacement cable	2m USB replacement cable to link USB LogIT(eg Explorer)to USB PC/Mac
D100125	9-25 way adapter	Adapter to use LogIT PC Link cable with 25 pin PC COM/serial sockets
D100126	Apple Serial Link cable	For Apple Macintosh and eMate 300 computers with Modem/Printer ports
D100127	PB1-2/Psi3-3a Link cable	For Pocket Book 1-2/Psion 3-3a also requires serial link(eg A-Link)
D100130	PB3/Psi3C Link cable	For Pocket Book 3 or Psion 3c direct (no other serial lead/link reqd)
D100129	DBus extension cable	To extend serial link cable or enable SwitchIT use with DataMeter

Other link cables for older computers still available - ask for details

### CONTROL PRODUCTS

D100101	Control LED	Can be programmed to light on and off (not LogIT SL compatible)
D100102	Control Buzzer	Can be programmed to sound on and off (not LogIT SL compatible)
D100103	Control Relay	For simple control lamps, motors etc up to 24V / 0.5A (not SL)
D100062	SwitchIT	4 channel relay control interface - up to 1A/24V per channel
D100064	AlarmIT	For adding buzzer/alarm - LogIT SL only
D100129	DBus extension cable	To extend serial link cable or enable SwitchIT use with DataMeter

### LogIT SOFTWARE

D100510	LogIT Lab 3 Universal - Single	LogIT Lab WIN 98SE+ compatible with all past & current LogIT's inc DV etc <b>NEW</b>
D100515	LogIT Lab 3 Universal - Site	LogIT Lab WIN 98SE+ compatible with all past & current LogIT's inc DV etc <b>NEW</b>
D100512	LLab std to Universal upgrade	Upgrades LogIT Lab 1/2 Standard Site License to Universal Site license <b>NEW</b>
D100499	Pocket PC starter - single user	Pocket PC/Windows CE V2.0 serial palmtop - needs PC-LogIT adapter (single)
D100500	Pocket PC starter - site license	Pkt PC/Windows CE V2.0 serial palmtop - needs PC-LogIT adapter (site)

### INSIGHT SOFTWARE compatible with LogIT dataloggers

Please note: DCP has been advised by the publishers that new Datalogging Insight 4 may not be available for the Mac

D100550	DL Insight 4 WIN (Single User)	Datalogging Insight 4 CD+manuals for Windows-USB compatible
D100551	DL Insight 4 WIN - 5 User	Datalogging Insight 4 upgrade license only - also requires single user pack
D100552	DL Insight 4 WIN - 10 User	Datalogging Insight 4 upgrade license only - also requires single user pack

Other upgrades on request