TECHNICAL DATA SHEET
Dataloggers

Monolog 2 offers a comprehensive range of portable self-powered datalogging devices for numerous sensor types that utilise the latest electronics and software. A range of common software and interface platforms will cater for the variety of applications requiring critical condition measurementt

MLTD16 Temperature Datalogger with Internal Sensor

Specification

Temperature Range	-40°C to +70°C
Memory	16,000 Readings
Accuracy & Resolution	±0.3°C Avg. Res. 0.5°C
Battery Type & Life	User Replaceable Lithium Battery, 1 -2 years battery life depending on use
IP rating	IP67
Sampling Rate	5 to 59 seconds or 1 to 255 minutes
Weight	70g
Size	Ø75mm (excluding lug), Ht 18mm
Warranty	12 month (excluding batteries)

Accessories

Windows Software	MLSWARE	Windows software
Interface	MLLINK	PC Interface
Start magnet	MLKEY	Start magnet in form of keyring

MLTXD16 Temperature Datalogger with Internal and External Sensor

Specification

Temperature Range	-40°C to +70°C
Accuracy & Resolution	±0.3°C avg res. 0.5°C
Storage Temperature	-40/85°C
Weight	70 grams
Temperature response time	Internal sensor T90 of 12min s/s tipped external sensor T90 of 4 min. in moving air
Memory	16,000 samples
Time and Date	Real time clock, accuracy better than 40 secs. Per month at ambient
Traceability	Temperature calibration can be provided to ISO 9002
Sampling Rate	5 to 59 seconds or 1 to 255 minutes
Power Source	User replaceable lithium batteries
Typical battery life	1 to 2 years (dependant of PC communication)
Case Material	Polycarbonate
IP Rating	IP51
Size	Dia. (excluding lug) 75mm, Ht. 18mm
Data recover	Via Chart Reader or interface and IBM compatible PC
Software	MSWARE, console STD, console PRO operating Windows 95 onwards
Recorder start up	Programmed time and date or magnet swipe
Warranty	12 Months (excluding batteries)

Accessories

Software	MLSWARE	Monolog 2 software disc for windows
Interface	MLLINK	PC Interface
Start magnet	MLKEY	Start magnet in fom of keyring

TECHNICAL DATA SHEET

Dataloggers

MLTXXD16 - Temperature Datalogger with 2 External Temperature Sensors

Specification

Temperature Range	-40°C to +70°C
Accuracy & Resolution	±0.3°C avg. res. 0.5°C
Storage Temperature	-40/85°C
Weight	70 grams
LED's	Green LED = Active/ Red LED = Alarm (plastic case only)
Temperature esponse time	s/s tipped external sensors T90 of 4 min. in moving air
Memory	16,000 samples
Time and Date	Real time clock, accuracy better than 40 secs. Per month at ambient
Traceability	Temperature calibration can be provided to ISO 9002
Sampling Rate	5 to 59 seconds or 1 to 255 minutes
Power Source	User replaceable lithium batteries
Typical battery life	1 to 2 years (dependant of PC communication)
Case Material	Polycarbonate
IP Rating	IP51
Size	Dia. (excluding lug) 75mm, Ht. 18mm
Data recovery	Via Chart Reader or interface and IBM compatible PC
Software	Windows for 3.1, 95, 98, NT onwards
Recorder start up	Programmed time and date or magnet swipe
Warranty	12 Months (excluding batteries)

Accessories

Windows Software	MLSWARE	Windows software
Interface	MLLINK	PC Interface
Start magnet	MLKEY	Start magnet in form of keyring

MLTHB16 - Datalogger Temperature and Humidity Sensors
Specification

Temperature Measuring Range	-20°C to +60°C
Humidity Measuring Range	0 to 100%
Accuracy and Resolution	Temperature ±0.3°C avg. res 0.3°C Humidity ±0.3% at ambient, res 0.5% and response time of T90 in 10 seconds moving air
Storage Temperature	-40/85°C
Weight	100 grams
Elongated Temperature probe response time	T90 of less than 1 minute for external sensor in moving air
Memory	16,000 samples
LED's	Green LED = Active/ Red LED = Alarm
Humidity measuring range	0 to 100%, accuracy ±3% at ambient, resolution 0.5% and response time in 10 seconds in moving air
Time and Date	Real time clock, accuracy better than 40 secs. per month at ambien
Tractability	Temperature/Humidity Calibration can be provided to ISO 9002
Sampling Frequency	1 to 255 minutes
Power Source	User replaceable lithium batteries
Typical battery life	1 to 2 years (dependant on frequency of PC communication)
Case Materia	Polycarbonate
IP Rating	IP51
Size	Dia. (excluding lug) 75mm, Ht. 50mm
Data recovery	Via ChartReader, or interface and IBM compatible PC
Software	Windows 3.1, 95, 98, NT onwards
Recorder start up	Programmed time and date or magnet swipe
Warranty	12 Months (excluding batteries)

Accessories

Software	MLSWARE	Monolog 2 software disc for windows
Interface	MLLINK	PC Interface
Start magnet	MLKEY	Start magnet in fom of keyring

TECHNICAL DATA SHEET

Monolog 2 offers a comprehensive range of portable self-powered datalogging devices for numerous sensor types that utilise the latest electronics and software. A range of common software and interface platforms will cater for the variety of applications requiring critical condition measurement.

ML-IE-DN-16/L - Temperature Datalogger with Internal and External Sensor

Specification

Temperature Range	Internal -40°C to +70°C External -100°C to +40°C
Accuracy & Resolution	Internal ±0.3°C avg res. 0.5°C External ±0.3°C avg res. 0.5°C
Storage Temperature	-40 to 85°C
Weight	70 grams
LED's	Green LED = Active/ Red LED = Alarm (plastic case only)
Temperature response time	Internal sensor T90 of 12min s/s tipped external sensor T90 of 4 min. in moving air
Memory	16,000 samples
Time and Date	Real time clock, accuracy better than 40 secs. Per month at ambient Multiple time zones supported
Traceability	Temperature calibration can be provided to ISO 9002
Sampling Rate	5 seconds to 255 minutes
Power Source	User replaceable lithium batteries
Typical battery life	1 to 2 years (dependant of PC communication)
Case Material	Polycarbonate
IP Rating	IP51
Size	Dia. (excluding lug) 75mm, Ht. 18mm
Data recovery	Via Chart Reader or interface and IBM compatible PC
Software	MLSWARE, console STD, console pro operating Windows 95 onwards
Recorder start up	Programmed time and date or magnet swipe
Warranty	12 Months (excluding batteries)
LCD Optional	ML-IE-DN-16L

Accessories

Windows Software	MLSWARE	Windows software
Interface	MLLINK	PC Interface
Start magnet	MLKEY	Start magnet in form of keyring

ML-OE-KJ-16L - Temperature Datalogger with External Thermocouple input

Specification

Temperature Range	0°C to +500°C
Connection Type	2 pin miniature
Memory	16,000 readings
Accuracy & Resolution	±4°C , Res. 2°C over range
Battery Type & Life	User Replaceable Lithium Battery, 1-2 years battery life depending on use
IP rating	IP51
Data Recovery	Download via PC interface and IBM compatible PC or print out through Chart Reader
Software	MLSWARE, console STD, console pro operating Windows 95 onwards
Recorder Start-up	Programmed time & date or magnet swipe
Time and Date	Real Time clock, accuracy better than 40 seconds per month at ambient. Multiple time zones supported
Sampling Rate	5 seconds to 255 minutes
Storage Temperature	-40 to +80°C
Case Material	Polycarbonate
Weight	70g
Size	Ø 75mm, Ht 18mm
Warranty	12 months (excluding batteries)
LCD Optional	Inclusive

Accessories

Software	MLSWARE	Monolog 2 software disc for windows
Interface	MLLINK	PC Interface
Start magnet	MLKEY	Start magnet in form of keyring

TECHNICAL DATA SHEET

Monolog 2 offers a comprehensive range of portable self-powered datalogging devices for numerous sensor types that utilise the latest electronics and software. A range of common software and interface platforms will cater for the variety of applications requiring critical condition measurement.

ML-IE-DC-16/ EJ-IE-DC-16L - Temperature Datalogger with Internal and External Sensor

Specification

Temperature Range	Internal -40℃ to +70℃ External -20℃ to +100℃
Accuracy & Resolution	Internal ±0.3℃ avg res. 0.5℃ External ±0.3℃ avg res. 0.5℃
Storage Temperature	-40/85℃
Weight	70 grams
LED's	Green LED = Active/ Red LED = Alarm (plastic case only)
Temperature response time	Internal sensor T90 of 12min s/s tipped external sensor T90 of 4 min. in moving air
Memory	16,000 samples
Time and Date	Real time clock, accuracy better than 40 secs. Per month at ambient
Traceability	Temperature calibration can be provided to ISO 9002
Sampling Rate	5 seconds to 255 minutes
Power Source	User replaceable lithium batteries
Typical battery life	1 to 2 years (dependant of PC communication)
Case Material	Polycarbonate
IP Rating	IP51
Size	Dia. (excluding lug) 75mm, Ht. 18mm
Data recovery	Via Chart Reader or interface and IBM compatible PC
Software	MSWARE, console STD, console PRO operating Windows 95 onwards
Recorder start up	Programmed time and date or magnet swipe
Warranty	12 Months (excluding batteries)
LCD Optional	EJ-IE-DC-16L

Accessories

Windows Software	MLSWARE	Windows software
Interface	MLLINK	PC Interface
Start magnet	MLKEY	Start magnet in form of keyring

MLTV8 - High Temperature Datalogger with Internal Temperature Sensor

Specification

Temperature Measuring Range	0to +125℃
Accuracy and Resolution	±0.5℃ avg. res 0.5℃
Storage Temperature	-40 to +85℃
Weight	70 grams
Temperature response time	T90 of 12 min. in moving air
Memory	16,000 samples
Sampling frequency	5 seconds to 255 minutes
Power Source	User replaceable lithium batteries
Typical battery life	1 to 2 years depending on frequency of PC communication
Case Material	Polysulfone
IP Rating	IP68
Time & Date	Real time clock, accuracy better than 40 seconds per month at ambient. Multiple time zones supported.
Size	Dia. (excluding lug) 75mm, Ht. 18mm
Data recovery	Download via PC interface and IBM compatible PC pr printout through Chartreader
Software	Windows 95 onwards
Recorder start up	Programmed time and date or magnet swipe
Warranty	12 Months (excluding batteries)

Accessories

Software	MLSWARE	Monolog 2 software disc for windows
Interface	MLLINK	PC Interface
Start magnet	MLKEY	Start magnet in fom of keyring

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MLTACXZY2 - High Temperature Autoclave Logger

The Autoclave logger is a special product that can withstand high temperature and pressure environments to +150°C/5 Bar for 30 minutes, 150°C for 60 minutes in dry heat and indefinite operation at +125°C. Primary intended use is the qualification of Autoclaves used for sterilisation but is also suitable for measuring any high temperature applications not exceeding the specifications below. The product is supplied with a stub probe that registers the environment temperature from +25°C to +150°C, and an internal temperature sensor for monitoring of logger internal temperature conditions and prohibiting repro-gramming of logger until internal temperature has returned to 40°C. Battery is user replaceable.

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Specification

Temperature Range	-25°C to +150°C
Endurance Ratings	Rated autoclave @ 150°Cm 5bar:30 minutes Typical oven (dry heat) @ 150°C:60 minutes Oven (dry heat) @ 125°C@ indefinite (depending on battery life) provided temperature never exceeds 125°C
Memory	2000 Readings
Accuracy & Resolution	for temperatures > 22°C±0.5°C Avg. Res. 0.5°C
Sensors	External sensor used for sampling environment under test Internal sensor measuring range of 1/150°C used for diagnostic purposes only
Storage Temperature	0/125°C
Elongated Temperature probe sensor time	T90 of less than 4 minutes for temperature probe in moving air
Time & Date	Real time clock, accuracy better than 40secs per month at ambient
Battery Type & Life	User Replaceable high temperature Lithium Battery, 1 year battery life depending on use
Data recovery	Interface and IBM compatible PC
IP rating	IP68 tested to 5 bar
Sampling Rate	5 to 59 seconds or 1 to 255 minutes
Case Material	316 Stainless steel & PEEK high temperature resin
Weight	345g
Size	Ø65mm, Ht 43mm, probe height 50mm and probe Ø4.5mm
Software	MSWARE, console STD, console PRO operating Windows 3.1, 95,98 and NT onwards
Recorder start up	Programmed time & date or magnet swipe
Warranty	12 months (excluding batteries)

Accessories

Software	MLSWARE	Monolog 2 Software disk for windows
Interface	MLLINK	PC Interface

Accessories

Software	MLSWARE	Monolog 2 software disc for windows
Interface	MLLINK	PC Interface
Start magnet	MLKEY	Start magnet in fom of keyring

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Version 1.3

TECHNICAL DATA SHEET

Monolog 2 Accessories

Alarm Link

An alarm link interface that allows the alarm status in the logger to control an external device (i.e siren).

Size	Dia. 80mm, Ht 35mm
Weight	50 grams
Storage Temperature	-40 to +85°C
Earliest firmware revisions of Junior required for support of Alarm link	The earliest firmware versions which support the Alarm Link are 1.1c (for 1.XX loggers), 2.3c (for 2.XX loggers) and 3.2c (for 3.XX loggers). Also, your logger must have the ability to indicate an alarm status, either through LED's, an LCD or through an audible alarm, which is denoted by Alarm Compatibility Symbol
Power Requirements	9-24 Volts DC, 100mA, External Source
Alarm Output	NC or NO, 0.5A @ 24VDC. maximum switched power 30W.
IP Rating	IP51
Warranty	12 Months

Chart Reader

The Chartreader allows download and printout of logged readings without the use of a computer. Printout can be either in a list of out of specification readings or a graph. Muliple sets of downloaded logged readings can be stored in the ChartReader's non-volatile memory for later transfer to a PC

Memory	1MB non-volatile memory, storage sufficient for download of 300 typical logger data sets.
Printer Mechanism	Impact printer (accepts duplication printing paper)
Printer Speed	3.5 lines per second (equivalent to1333 logs per minute)
IP Rating	IP50
Data Recovery	Download via PC interface and IBM compatible PC or printout
Size	Length 225mm, width 120mm, height 100mm
Storage Temperature	0/80°C (32/176°F)
Weight	1.125 kilograms
Power Source	Rechargeable NiCad battery
Battery Life Before Recharge	Typically one hour continuous printing
Battery Recharge Time	Typically 90% in one hour
Recharge Adaptor Rating	12 volts @ 1 Amp or vehicle cigarette lighter (Adaptor not supplied)
Case Material	Polycarbonate
Configuration Software	Console for Windows® 98 or later, available free on www.digitron.co.uk
Operating Temperature	0/50°C (32/122°F)
Warranty	12 months, excluding batteries

Interface Holder

The Alarm Link Interface Holder is designed to hold the Alarm Link Interface together with a Monolog 2 Logger secure in position. Its four screw holes make it easy to fix wherever you need it to be.

Weight 62gms
Size 100 x 96 x 43mm

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