



Designed for ultimate application accessibility, whether transportation or stationary

Combining innovation with simplicity, the high accuracy MicroLite USB data logger is a vital tool for monitoring and recording a variety of data. Available in 6 models, offering a unique plug and record data logger for every application and helping organizations maintain the highest standards throughout the cold chain. Real-time sensor readings with corresponding time stamp are clearly displayed on the logger's LCD screen, incorporating alarm thresholds. The logger is designed for low power consumption to extend battery life and reduce the time between battery replacements.



High functionality low cost multi-trip logger for an unbroken cold chain

USB 2.0 interface for fast track communication and firmware updates

Unique Boomerang feature that automatically creates and emails PDF data report when logger is connected to PC

Rapid data download to Graph, Table view and Excel spreadsheet

Built-in LCD with decimal point readings and LED alarm indicator

High accuracy sensors with 16-bit resolution

2-year battery life, using Nano Watt technology

Up to 32,000 sample memory accommodating long-haul transports

Reed switch using magnet key to mark time stamps, activate and stop logging

Built-in real-time clock and calendar

Dust and water proof

Cradle wall mounting for fixed monitoring

# INNOVATIVE MONITORING SOLUTIONS

# MicroLite Solution

## THE PLUG & RECORD MINI DATA LOGGER



**PHARMACEUTICAL**  
Monitoring environments in labs, fridges, freezers and culture rooms



**WAREHOUSING**  
Chemical, industrial and perishables storage



**COLD STORAGE**  
Optimizing temperature in refrigerated warehousing



**HOSPITALS**  
Medical alert monitoring, sterilization, blood products storage and transport



**COLD CHAIN**  
Ensuring quality products throughout the cold chain process

# MicroLite Solution

## THE PLUG & RECORD MINI DATA LOGGER



## MicroLite compact cost-effective data logging

fourtec has expanded the proven MicroLite product line with the release of the MicroLite II, supporting external sensors and RH measurements. Delivering ultimate application accessibility, the MicroLite is an ideal solution for a variety of industrial cold chain logistics, requiring a small form factor USB data logger.

The comprehensive MicroLite range allows organizations to select the unit most appropriate for their mission-critical environment:

Internal Temperature



Internal Temperature & Humidity



External 4 to 20 mA input



External 0 to 10 V input



External NTC 10 k Ohm input (with NTC probe)



Industrial screw-to-wire interface located inside logger cap allows direct data transfer from external sensors to the logger's memory

### MicroLite typical operating method



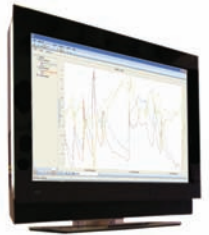
1

Record data using internal or external sensors



2

USB data download to PDF report with automatic email delivery



3

Data analysis using integrated DataSuite software

### MicroLite Case Study



#### Company:

Established in 1983, ships highly perishable frozen seafood samples to brokers and customers across the United States.

#### Challenge:

Using correct quantities of frozen gel packs during shipments. Too few would result in product spoilage, and too many causing excessive air freight charges.

#### Requirements:

- A water resistant logger that is compact, accurate, low cost and easy-to-use.
- Data analysis software that could provide detailed analysis of the shipment from origin to destination, allowing the company to optimize its shipping process.

#### Solution:

MicroLite: Accurate and reliable temperatures monitoring during shipping

#### Result:

Substantial cost savings in air freight, refrigerant packs, and minimized product loss.

#### Method:

- MicroLite placed inside insulated shipping boxes with a postage-paid return envelope to the company after shipment delivery.
- The logger is programmed to start when the courier arrives to pick up the package.
- Samples are recorded at 1 minute intervals during the overnight shipment.
- Once the logger is returned to the company, data is downloaded for analysis.

# DataSuite for MicroLite Software

The DataSuite software provides security for your products with online monitoring and control of the entire application environment.

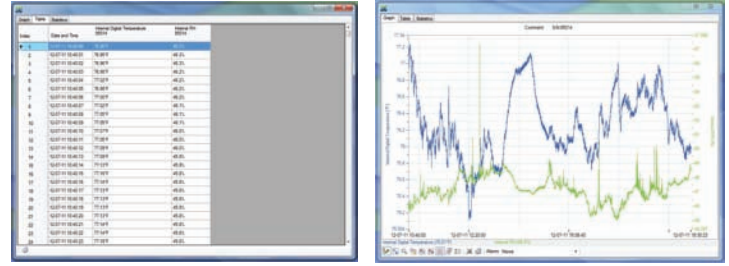


**Supported Operating Systems:**  
Windows® XP SP3 / Vista / 7 (32 and 64 Bit)

**Minimum Hardware Requirements:**  
Pentium 4, 2 GHz Processor or better,  
512 MB RAM, 250 MB available disk space

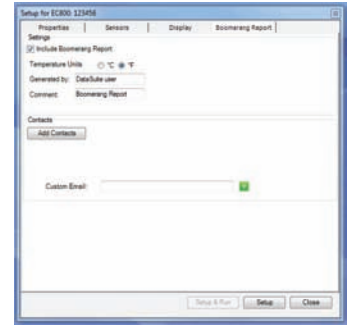
## Data View Features

Real-time data in multiple displays (Graph, Table, Statistics)



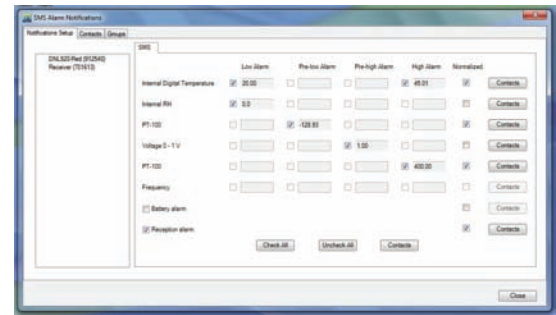
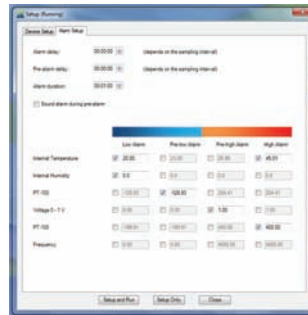
## Boomerang Feature

Configure logger setup to automatically create and email PDF data report when connected to computer via USB.



## Alarm Features

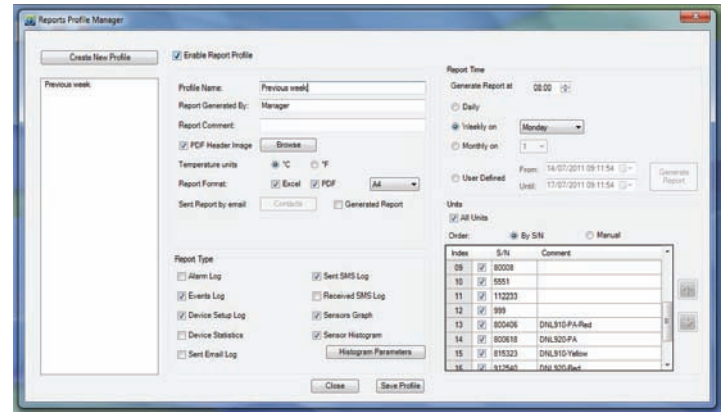
Alarm level setup with email & SMS notifications. Two alarm levels, allowing for programming of separate parameters, including alarm delay and duration



FDA Title 21 CFR  
Part 11 Compliant

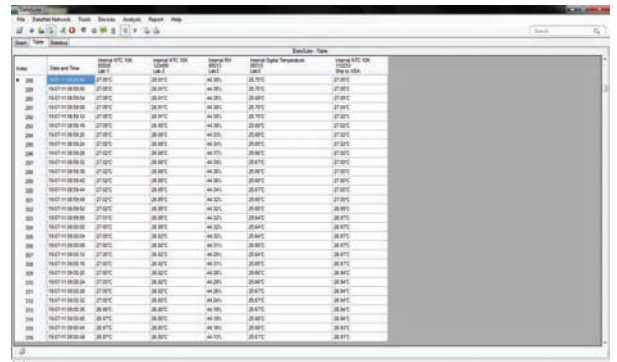
## Report Module

The Report module provides the MicroLite user with an intuitive interface for creating and generating reports which have many parameters garnered from the MicroLite units and software. Each report can be emailed to a selected distribution list, at pre-defined time intervals, in PDF and Excel format.



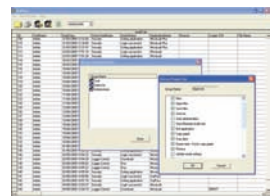
## Analysis Features

Dew point analysis, FO Pasteurization, histogram, MKT, statistics with export to Excel and CSV formats

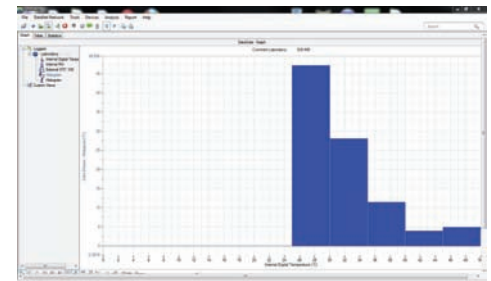


## DatPass

DatPass is a user administration software which supports the assignment of passwords and operating privileges for all fourtec industry application software ensuring CFR compliance. CFR is a Food and Drug Administration (FDA) issued regulation Title 21 Code of Federal Regulations, Part 11.



DatPass Audit Trail





**fourtec**  
FOURIER TECHNOLOGIES

Specification	LITE5016 & LITE5008 Internal Temp	LITE5032P & LITE5008P Internal Temp	LITE5032P-RH Internal Temp/RH	LITE5032P-4/20 4 to 20 mA	LITE5032P-V 0 to 10 V	LITE5032P-EXT External NTC
Range	Temp: -40 to 80 °C	Temp: -40 to 80 °C	Temp: -40 to 80 °C RH: 5-95 %	4-20 mA	0-10 V	-50 °C to 150 °C
Accuracy	Temp: 0.3 °C	Temp: 0.3 °C	Temp: 0.3 °C RH: ± 2%	0.5 %	±0.5 %	-50 to 60 °C ±0.3 °C 60 to 150 °C ±0.5 %
Resolution (16-bit)	0.1 °C (display) 0.06 °C (software)	0.1 °C (display) 0.06 °C (software)	Temp: 0.04 °C (display) 0.06 °C (software) RH: 0.5%	1.16 uA	200 µV	0.1 °C (display) 0.06 °C (software)
Maximum Load	N/A	N/A	N/A	30 mA, 5.2 V	5.2 V	N/A
Auto PDF & Email Delivery (Boomerang Feature)	X	✓	✓	✓	✓	✓
Dew Point	N/A	N/A	✓	N/A	N/A	N/A
LCD display	✓	✓	✓	✓	✓	✓
LED Alarm Indicator	X	✓	✓	✓	✓	✓
USB 2.0	✓	✓	✓	✓	✓	✓
Sample Memory	8,000 and 16,000	8,000 and 32,000	32,000 (16K per channel)	32,000	32,000	32,000
Sampling Rate	Once per second/ once every 2 hours	Once per second / once every 18 hours				
Battery Type / Battery Life	CR2032 3V 1.5 years, depending on sampling rate	CR2032 3V 2 years, depending on sampling rate				
Operating Environment	-40 to 80 °C					
Dimensions (with cap)	11 x 3.9 x 2.6 cm		11 x 3.9 x 3 cm	14 x 3.9 x 2.6 cm		
Weight	45.5 g					
Compliance	CE, EN12830, IP68			CE, EN12830, IP54		
Wall Mounting	X	Logger cradle accessory provided				

## About fourtec

fourtec – Fourier Technologies is a recognized leader in data-logging and monitoring solutions for controlled industrial environments, such as food, pharmaceutical, medical, storage and transportation industries.

Our solutions enable our customers to deliver higher quality products, ensure consumer safety, comply with regulatory requirements and increase profitability. Innovation, expertise and a commitment to quality are the values that drive the development and production of our products.

fourtec – Fourier Technologies is an associate member of GCCA (Global Cold Chain Alliance). A proven specialist in cold chain management systems, we deliver end-to-end solutions that accompany products from the processing floor to the end user.

fourtec – Fourier Technologies operates in over 60 countries, through an established network of selected resellers. fourtec's trusted data acquisition solutions have been implemented globally by many mission critical organisations including NASA, Coca Cola, Qantas, Colgate and TEVA.

fourtec – Fourier Technologies is a spinoff company based on the industrial division of Fourier Systems, a world leader in data logging, data acquisition and monitoring, with more than 20 years of experience in serving this market.