fourtec
FOURIER TECHNOLOGIES

Designed for ultimate application accessibility, whether mobile 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. The MicroLite is 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 accuracy, high functionality, low cost data logger
- Direct USB interface for setup, data download and firmware updates
- Unique Boomerang* feature that automatically creates and emails PDF data report when logger is connected to PC
- Complimentary DataSuite Software for comprehensive data analysis and logger calibration
- Rapid data download to Graph, Table view and Excel spreadsheet
- LCD featuring up to 3 decimal point readings, min/max data history and battery level
- LED alarm indicator
- Up to 2-year battery life in normal conditions
- 32,000 sample memory accommodating long-haul transports
- Magnet key to mark time stamps, activate and stop logging
- Built-in real-time clock and calendar
- Dust and water resistant, depending on logger model
- Cradle wall mounting for fixed monitoring

*Patent Pending (US SN: 13/433,432)

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 - compact, cost-effective data logging

The MicroLite product line measures temperature, humidity, voltage and current via internal + external inputs. 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 LITE5008P / LITE5032P	Internal Temperature & Humidity LITE5032P-**RH**	External 4 to 20 mA input LITE5032P-4/20	External 0 to 10 V input LITE5032P-**V**	External NTC 10kΩ input (with NTC probe) LITE5032P-EXT

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

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:
The company produces additives, fillings and ingredients for the confectionery industry. Their customers include international brand names such as: Pillsbury, Nestle and Unilever.

Challenge:
The company must monitor the product temperature during the production process, to ensure Pasteurization has occurred, in addition to providing documentation proving that the

Pasteurization procedure was completed successfully.

Requirements:
• A system that proves that the Pasteurization process was performed according to required standards
• Low-cost, reliable, easy-to-integrate solution.

Solution:
MicroLite External NTC logger – for controlling Pasteurization during the production process.

Result:
Instant ROI for the company due to the intuitive and quick implementation of the MicroLite logger + NTC temperature probe solution, with the user friendly, free DataSuite software.

Method:
• The MicroLite External NTC temperature data logger was added to the machine's existing controller.
• The temperature of the production process is monitored by the MicroLite device, which is connected to the NTC temperature probe.
• After each stage of the production process ends, the MicroLite device is connected via USB to the computer and a PDF report is generated using the DataSuite software.
• The report indicates if there are any deviations from the defined standards.

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DataSuite Software for MicroLite

The license-free DataSuite software provides security for your products with online monitoring and control of the entire application environment.
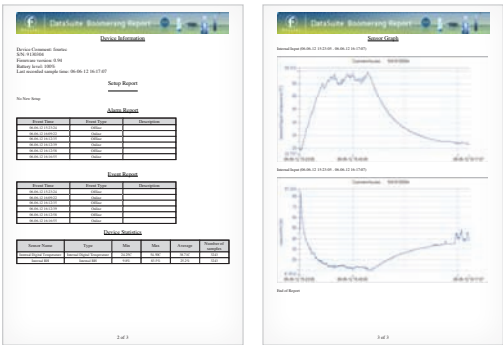
Data View Features

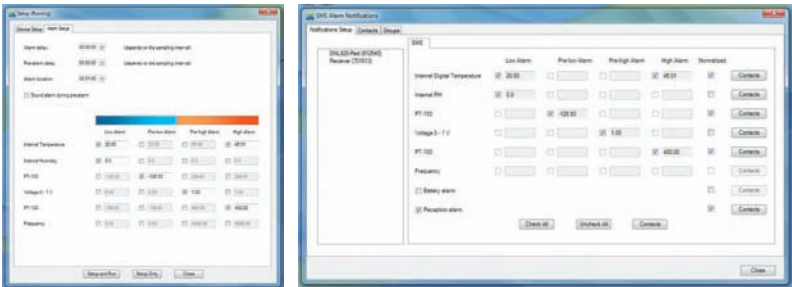Real-time data in multiple displays (Graph, Table, Statistics)
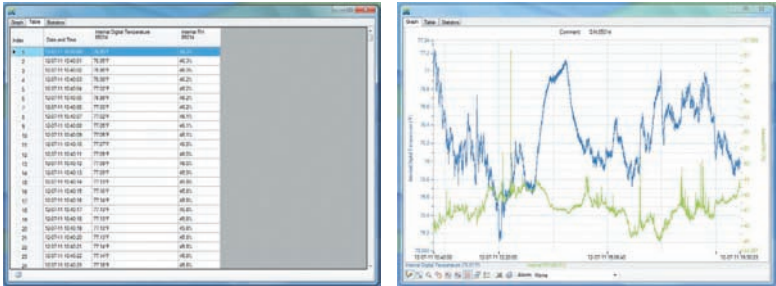
Boomerang* Feature

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

*Patent Pending (US SN: 13/433,432)

Alarm Features

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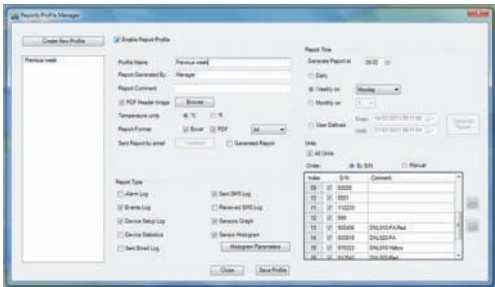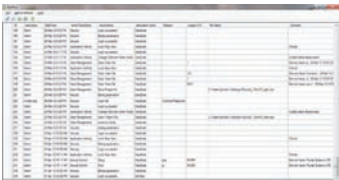
Report Module

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

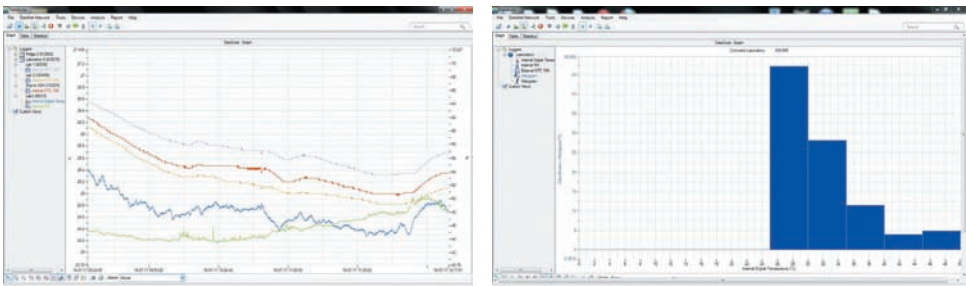## FDA Title 21 CFR Part 11 Compliant

DatPass

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

DatPass Audit Trail

MicroLite Specifications

	LITE5008 LITE5016 Internal Temp	LITE5008P LITE5032P 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	-40 to 80 °C	-40 to 80 °C	Temp: -40 to 80 °C RH: 5 to 95 %	4 to 20 mA	0 to 10 V	-50 to 150 °C
Accuracy	±0.3 °C	0 to 60 °C: ±0.3 °C After calibration: -40 to 0 °C: ±0.3 °C 60 to 80 °C: ±0.3 °C	Temp: ±0.3 °C RH: ± 2%	±20 μA	±5 mV	± 0.3 °C (after calibration with fourtec NTC sensor)
Resolution	0.1 °C (display) 0.01 °C (software)	0.03 °C or better	Temp: 0.01 °C RH: 0.05 %	1 μA (display) 5 μA (software)	1 mV (display) 4 mV (software)	0.02 °C or better
Maximum Load	N/A	N/A	N/A	25 mA, 3 V	12 V	N/A
Dew Point	X	X	√	N/A	N/A	N/A
LCD	√	√	√	√	√	√
LED Alarm Indicator	X	√	√	√	√	√
Sampling Memory	8,000 and 16,000	8,000 and 32,000	32,000 (16K per channel)	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 and operating conditions	CR2032 3V 2 years, depending on sampling rate and operating conditions				
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					
Standards Compliance	CE, EN12830, IP67		CE, EN12830, IP54			
Wall Mount	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.