LM-U Pro series Universal Datalogger

G-Tek's Universal series single channel data loggers are reusable, portable, easy to access the data among the most popular and flexible products. The **LM-U^Pro Data logger** is an external sensor universal input- RTD / Thermocouple / process input. It also offers a choice of PC connectivity through USB port. This versatile device can be configured via software to monitor the process parameter and displaying of data for analysis and generating the report.

The LM-U ^Pro Data logger measures temperatures from -200 to +850 °C using an external sensor RTD (Pt-100), covering a wide temperature range for both low and high-temperature applications.

The LM-U ^Pro Data logger supports various thermocouple types (TC-J, TC-K, TC-R, TC-S, TC-T) for specific measurement capabilities. It also accepts process inputs like unipolar voltage and 0-20 / 4-20 mA signals, expanding its utility beyond temperature monitoring. Data loggers come with individual NABL traceable calibration certificate.

Features:

- Up to 32000 Data Records
- Multi character LCD Display with Rec, Min, Max, Battery and Current Reading
- Universal sensor input
- View Min and Max On display over entire batch on click of a button
- Display resolution of 0.1
- Storage resolution of 0.01
- Battery Life of > 1 year*
- User Replaceable Battery
- Fully user programmable configuration
- Insert instantaneous data Tag with time stamp
- Configure and Download multiple data loggers in same file

*if data is stored at 15 minutes interval and display OFF mode

Specifications:

General

Remote Sensor	RTD/Thermocouple/Process Input
No. of Sensor	1
Sensor Type	RTD - PT-100; DIN43760, α=0.00385
	Thermocouple – J, K, R, S, T
	0-1 V
	4-20mA; 0-20mA (Internal Shunt Resistance of 50 Ω 0.1%)
Accuracy	± 0.25% FSD ±1 digit
Linearization	Polynomial Based Software Linearization
Resolution	0.1/1.0
CJC Error	±0.5°C for 0-50°C
Sensor Type and Range#	Refer to the sensor types and their range
Calibration	Each device accompanies NABL (ISO/IEC 17025) traceable certificate

Power Requirement:

Battery*	User replaceable 3 V, 3500 mAh, 2 X AA (1.5V) Energizer Ultimate Lithium Battery
Battery Life	Up to 1 year battery operating life with shelf life of 1 year (if data is stored at 15 minutes interval and display OFF mode). The battery indicator on the display provides information on the remaining lifetime.
Battery Reverse Polarity	Protected

*: Dispose or recycle the Battery and LM-U^Pro ULT in accordance with the WEEE 2012/19/EU guidelines or your local regulations. For the suitable recycling, the device may also be returned to the manufacturer.

Environmental Specification:

Temperature	(Operation) 5°C to 45°C
	(Limiting) 0°C to 50°C
	(Storage) -20°C to 60°C
Humidity	(Operation) 10 to 80 % RH Non-Condensing
	(Storage) 5 to 90 % RH Non-Condensing

PC Interface and Software:

PC Interface	Data of up to 1 year (for 15 minute logging interval) can be extracted using LMView software.
Connectivity	Micro USB data cable (USB 2.0 Type-A ports Compatible)
Software Compatibility	LMView is compatible with Windows Operating System currently supported by Microsoft.
Data Download Time	Approx. 5 minutes for 32000 data records

Human Interface:

Display Type	3.5 Character LCD Display with Min, Max, Battery Status, Alarm Hi-Low and Current Temperature
Display Dimension	33 x 30 mm; TN Reflective
Display Resolution	0.1
Display ON/Auto off	Programmable from PC Application
Status Indicator	HB LED for Device working
	STR LED for Batch Start / Stop
Panel Keys	Front panel Keyboard consisting of 2 keys
Min / Max	Min Data Display / Max Data Display / Current Data with respect to Current Measurement
Display Blinking	on Alarm high - low Condition
Reading Types	Actual with Min Max. ON Display and PC
Reusability	Yes
Online Feature	Power saver mode when USB connected, Online Batch with Current Data Display using LMView software

Batch Storage / Data Memory Details:

Start / Stop	Immediate
Batch Stop	Intermediate Any time / Memory Full / At Specific Time
Store Interval	5 seconds to 18 hours
Delayed Start	Absolute / Relative up to 45 days
Tagging	Yes. On long press of a Key for 4 seconds with an indication on display.
Batch Stop required to Download	No
Data Storage	Yes
Memory	32000 Data Records
Memory Type	Flash, Non-volatile, Data Retention up to 100 years
Download Batch	Intermediate after any time the batch started/After the Batch is stopped.

Physical Characteristics:

Dimension L x W x D (mm)	135 (L) x 76 (W) x 27 (D)
Mounting	Wall Mounting Bracket

LM-U ᴾʳᵒ series Universal **Datalogger**

Standards:

EMI-EMC	EN 61326 Class A
Pollution Degree	II
Installation Category	I
Vibration	2g Peak (10Hz-150Hz)
Shock	IEC 61010-1
IP Rating	IP 30

#:Sensor Types with their respective ranges

Sensor	Range
RTD (Pt-100)	-100 to 600 °C
4-20mA	± 1999
0-20mA	± 1999
0-1V	± 1999
J type TC	0 to +400 °C
K type TC	0 to +1200 °C
R type TC	0 to +1700 °C
S type TC	0 to +1700 °C
T type TC	-100 to +400 °C

LMView: An Overview:

This software is a Windows™ based application for accompaniment to the LMᴾʳᵒ series of data logger to configure, download, view and generate the reports. Intuitive, easy to use. Connect multiple data loggers and bring their data to a single file for better presentation of data and understanding process. Also available in 21 CFR Part 11 Compliant version.
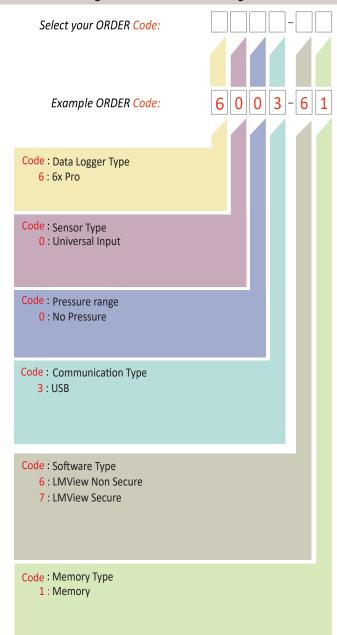
Key Features:

- Intuitive and user friendly- Few keys/buttons to play with
- 21 CFR Part 11 compliant
- View audit trail based on user, Date - time and Activity
- Non Editable data
- Every user activity is logged
- Auto logout
- Password expiry
- Configure and download multiple data loggers
- View multiple data logger's data as single tabular data
- View multiple data logger's data in as single graph
- Very useful for validation purpose
- Mark an event or Tag
- View Tags in graph as well
- Generate separate report for tags, summary, Alarms
- Filter the data based on date and time
- Statistical calculations – Min, Max, Average, MKT
- Various date formats
- Set your own header/ footer for the report
- On site calibration/ Restore factory calibration

Select your ORDER Code:

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Example ORDER Code:

6 0 0 3 – 6 1

Code : Data Logger Type
6 : 6x Pro

Code : Sensor Type
0 : Universal Input

Code : Pressure range
0 : No Pressure

Code : Communication Type
3 : USB

Code : Software Type
6 : LMView Non Secure
7 : LMView Secure

Code : Memory Type
1 : Memory

Overall Dimension:

135
76
27

LM-U⁻ᴾʳᵒ
HBT   STR
g-tek

Dealer / Representative

CE   DNV   ISO 9001-ISO 14001

g-tek
better by performance

Manufacturers of :
- Circular Chart Recorders
- Inkless Recorders
- Paperless Recorders
- Scanners & Data Loggers
- Networked Data Loggers
- Application Software
- Web based DAQ
- Vaccine Series Data Loggers

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