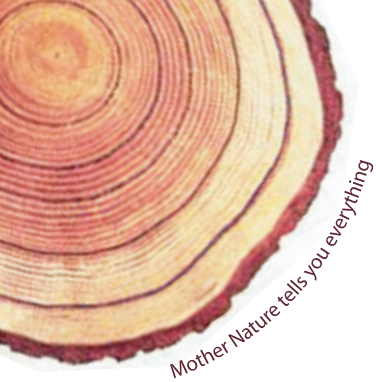


Equiplog Data Logger

Useful for ILR, Vaccine Freezers, WHO Compliance

Record it...
Control it...
Perfect it.

RoHS VERIFIED

CE

MANAGEMENT SYSTEM CERTIFICATION
DNV
ISO 9001 - ISO 14001

g-tek™
tells you everything

Equiplog Data Logger

DL/I-EMD with M2M Interface for Equipment Monitoring Systems

The Equiplog Data Logger by G-Tek is a cutting-edge solution for real-time equipment performance monitoring, specifically designed to ensure compliance with WHO PQS E006/DL01.2 and E006/EM0.1.2 standards. This advanced device collects and stores performance data locally or in the cloud, with a capacity for up to one year of storage. Users can easily access historical data for the last 30 days directly from the display, eliminating the need for downloads or computer connections.

Engineered for optimal temperature monitoring during the storage of vaccines and other medical products, the Equiplog is pre-configurable to meet all three EMS levels as per WHO PQS guidelines. It efficiently records appliance data objects, maintains relative time, and generates standardized logger data accessible to other monitoring systems, such as ILR and vaccine freezers. Throughout the measurement program, sensor input readings are continuously monitored and saved, ensuring data integrity.

Key features include compliance with WHO PQS E006/DL01.2, E006/EM0.1.2 and E006/DS01.2, M2M interface for appliance monitoring, compatibility with SECOP compressors and a USB Type-C port for easy data access. The logger offers model ranging from a Level-1 to Level-3 of EMS levels. With the functionalities like OLED display, event indications for alarms, error codes, mobile app integration, and real-time cloud data access, the Equiplog Data Logger ensures efficient monitoring. It is also compatible with the Varo App on your smartphone, providing instant cold chain insights sent directly to your inbox. Equipped with a rechargeable battery, it is a reliable tool for maintaining cold chain integrity and the safe storage of medical products.

Features:

- WHO/PQS/E006/DL01.2 Compliant
- WHO/PQS/E006/DS01.2 Compliant
- WHO/PQS/E006/EM01.2 Compliant
- Meets the requirements for all three EMS levels
- Compatible with Varo App on your smartphone for instant cold chain insights sent directly to your inbox
- M2M Interface for Appliance Data Monitoring:
  - Compartment Temperature and Door opening
  - Appliance Supply and Compressor On/Off time
  - Ambient Temperature and Humidity
- Connects to SECOP Compressors
- MODBUS RS485 master to connect to controller
- USB Type-C port for M2M Data Access
- 1 Year of data storage and PDF report of last 60 days
- Direct PDF Summary report of last 60 days as per WHO PQS guideline
- Standard Json format files compatible with all appliance data objects
- Rechargeable battery of operating life 10 years*
- Model options to choose from:
  - Level-1: Data Logger with M2M Interface
  - Level-2: Integrated EMD with Local communication
  - Level-3: Integrated EMD with Local and remote communication
- 1.5"OLED intuitive Display (Optional) with multi-function menus
- Resolution of 0.1°C for Display and Storage
- Local Date and Time setting option
- History data view of last 30 days on display
- Event Indications such as Alarms, Door open, Power outage etc.
- Audio-Visual indication for Temperature Alarms
- Audio-Visual monitoring Enable/Disable option
- Error codes for fault conditions in the Appliance
- Mobile Application (Optional)
  - Data Viewing and upload on the Cloud Server Application
- GSM Add-On module feature (Optional)
- Cloud Server Application for detailed Analysis and report generation
  - Real time data monitoring on Cloud Server Application

Specifications:

Display and Operator Panels#

Display Type#	1.5" OLED display (128x128 pixel Gray scale) with, • Battery Level, Power status, USB symbol, REC indication, GSM strength • Alarm(s) messages, Alarm trigger (Bell) symbol, Local or absolute# date & time • Alarm status (✓/✕) symbol, Current reading for Vaccine compartment with measurement unit. • Multi day Alarm History markers(▲or▼ arrows)
Status Indicator#	Status LEDs for • Device working indication, • System Errors condition, • Battery condition, • Alarm Heat/Freeze Indication
Panel Keys#	For Data Logger without Display : 1 key for data recording start; 1 key for alarm acknowledgment For Data logger with Display : 3 multi-purpose keys; 1 key for alarm acknowledgment

Analog Inputs

No. of Inputs	8 Sensors 2 x Temperature sensors (Vaccine, Freezer compartment) 2 x Door sensors (Vaccine, Freezer compartment) 2 x Potential free contact for Compressor On/Off 1 x Ambient Temperature & Humidity sensor (Internal) 1 x Temperature sensor for Appliance self Test (Internal)
Temperature Sensor	Thermistor - Tayao 10K NTC, 3 mm diameter, 2.5 meter long cable with sealed cap
Operating Range (Sensor)	-40 °C to + 60 °C (-40 °F to +140 °F)
Accuracy	± 0.5 °C for the range -30 °C to + 30 °C; ± 0.7 °C otherwise
Temperature Response Time	T90 < 20 minutes as per EN12830:1999
Resolution	± 0.1 °C
Door Sensor#	Magnetic reed switch/Potential free contact
Operating range	-30 °C to + 50 °C (-22 °F to +122 °F)
Accuracy	Binary, open/closed
Response Time	An "**open**" event is identified whenever door panel is not fully seated in the closed position for proper compartment sealing.
Voltage Monitoring Input#	
Operating range	-30 °C to + 50 °C (-22 °F to +122 °F)
Accuracy	± 2 % for DC range 0- 72 V ± 2 % for AC range 0- 600 V
Resolution	± 0.1 V
Current Monitoring Input#	
Operating range	-30 °C to + 50 °C (-22 °F to +122 °F)
Accuracy	± 5 % for DC range 0- 10 A ± 5 % for AC range 0- 30 A
Resolution	± 0.1 A
Ambient Temperature-Humidity Sensor	Solid state MEMS sensor#
Operating range	-20 °C to + 60 °C (-4 °F to +140 °F) 0 to 100 %RH
Accuracy	± 0.5 °C for the range +10 °C to + 40 °C; ± 0.7 °C otherwise ± 3 %RH for the range 20 to 80 %RH ± 5 %RH otherwise
Resolution	± 0.1 °C ± 0.1 %RH
Calibration	Each device accompanies NABL (ISO/IEC 17025) traceable certificate

Alarm Details

Heat Alarm Settings*	For Vaccine: +8°C or above for 10 hours; For Freezer: -15°C or above for 60 minutes
Freeze Alarm Settings*	For Vaccine: -0.5°C or below for 60 minutes;
Door Open Alarm Settings*	For Vaccine: > 5 minutes of continuous door opening For Freezer: > 30 seconds of continuous door opening
Power Outage Alarm Setting*	> 24 hours of continuous power outage
Alarm Visual	Display shows (▲or ▼) arrow for alarm Heat/Freeze condition with bell symbol
Alarm Audio	Buzzer Output > 65 db. Buzzer will beep in alarm Heat/Freeze condition. For details please refer User Manual.
Alarm Acknowledgement	By pressing key for 1 second. After Alarm acknowledgement buzzer will be deactivated.
Alarm Event objects	Heat Alarm: "HEAT", Heat Alarm Acknowledge: "HEATACK", Freeze Alarm: "FRZE", Freeze Alarm Acknowledge: "FRZEACK" Vaccine/Freezer Door Open: "DOOR" Vaccine/Freezer Door Open Acknowledge: "DOORACK" Power Outage: "POWR" Power Outage Acknowledge: "POWRACK"

Batch Details

Activation	**Data logger without display:** By Pressing "Start" key for more than 10 Seconds. **Data logger with display:** By Pressing "Up" key for more than 10 seconds.
Deactivation	Cannot be manipulated, reset or deactivated once activated
Data Recording Interval	15 minutes Pre-fixed

Memory

Data Storage	Yes
Memory Type	Flash, Non-volatile, Data Retention of more than 20 years
Memory Size	1 year's data storage and summary PDF report of last 60 days
Memory Setting	Rollover data records

Environmental Parameters

Temperature during Transport and Storage–Device inactivated	-30 °C to + 70 °C with Data logger inactivated except relative timekeeping
Temperature during operation	-10 °C to + 55 °C
Humidity during Transport, Storage and Operation	0 to 95 %RH non condensing
Altitude	< 2000 meter

Power Requirements

Power supply	12-48 V DC, 2 A (DC adapter) or SMPS with Power output of 15 V DC, 3 A, 35 W
DC power Output	5 V, (0.8 to 1.2 A), Max 5.2 W
Power connector	Barrel-type male plug with captive cable connected to the appliance
Sleeve Dimensions	diameter : 5.5 mm; length: 9.5 mm;
Pin Parameters	diameter: 2.1 mm; Polarity: Pin positive, sleeve negative;
Cable type	captive to appliance and easily replaceable by trained technician; cable length: 20 cm
Battery	LiFePO4 Rechargeable Battery 3.6 V, 1500 mAH
Battery Life	Operating life of 10 Years
Battery Backup	More than 30 days* with recommended operating condition for Data Logger without Display. More than 20 days* with recommended operating condition with display operated 4 min/day for Data Logger with Display.
Minimum Battery run time after full charging	With 8 hours of charging the Battery, it will run for minimum 48 hours

User Interface

Home screen view	
Display header	Battery Level, Power status, USB symbol, REC status, GSM strength#
Main Body	Alarm(s) messages, Alarm trigger (Bell) symbol (if any),Local or absolute# date & time, Alarm status (✓/✕) symbol, Current reading for Vaccine Compartment with measurement unit.
Footer	Multi day Alarm History markers (▲ or ▼ arrows) (if any)
History Data view	Last 30 days history data: day wise overview of vaccine compartment for min, max, average, Heat/Freeze alarm duration, on the display using keyboard
Appliance details view	Appliance Manufacturer: Make, Model, Serial Number, PQS code
Logger details View	Logger Manufacturer: Make, ID, Serial Number, PQS code
Modbus details View	Modbus Communication parameters settings information
Linbus details View	LINbus Communication parameters settings information
System Live View	**Power & Cooling** : Power and Compressor status, **Temp. & Door** : Vaccine, Freezer, Ambient Temperature & Door status **Error codes**: Error Status for Battery, self test, Modbus, Linbus, Vaccine, Freezer sensor **Last data upload#**: Date and Time **Alarm Monitor** : Enable/Disable **RTC Setting** : Set Local Date and Time
Data File Type	Json Data Objects file for data records, PDF file for Summary report
Data records in Json objects	As specified in PQS specification protocol WHO/PQS/E006/DS01.2
Time format	Comply with the ISO 8601 Internet Date Time format, Absolute time specified in format: YYYYMMDDThhmmssZ Relative time specified in format: PnDTnHnMnS
Logger battery Remaining	Estimated number of days remaining to operate the logger normally on battery
RTC Wakeup (RTCW) Time	Relative timestamp of the last time the logger resumed from Off to ON condition.
Mounting of device	Data logger is integrated within an Appliance
Material	Polycarbonate Plastic: non-breakable, non-corrodible housing
On site Installation	Not required
Instructions	User manual and Technician manual in Arabic, English, French, Mandarin Chinese, Russian, Spanish and Hindi.
Training	If requested, remote training on installation, on-site use, maintenance of the hardware and download of data via the M2M data interface.
Warranty	2 years from the date of dispatch. Refer to warranty certificate for more details.
Service Provision	Replaceable parts of the data logger shall be supplied on request.

Communication Details

Data Connector	USB Type-C female receptacle shall be used for data download by external devices and power supply from external devices to the logger in the event the logger's energy storage is depleted.
Connectivity	USB 2.0 Compatible Type-C, FAT16
Data Download Time	Approx. 2 minutes for full data download

Equiplog Data Logger

• Your Ordering Code : mail to sales@gtek-india.com

Physical characteristics

Overall Dimensions (L x W x D) mm	110 x 80 x 65 mm
Cutout Dimensions (L x W) mm	92 x 45 mm
Weight	Approx. 350 gms

Conformity Standards

Electromagnetic Compatibility	IEC 61000-6-1/6-3
Resistance to Electrical Storms	IEC 61000-6-1; (IEC 61000-4-2 Basic Standard for applicability of tests)
IP Rating	IP 64 (Bezel only) for USB Type- C M2M port connections with left unconnected and when cable is connected to an E-EMD device
Pollution Degree	II
Installation category	I
RoHS, Reach	Compliant (EU directive 2011/65/EU)
Verification	In accordance with PQS verification protocol E006/DL01-VP.2

#: Optional Features, please refer to the order code to know about installed options in your device. Sensors are not part of the Data logger and to considered in accessories. Voltage, Current & Door sensors are not included in the accessories.

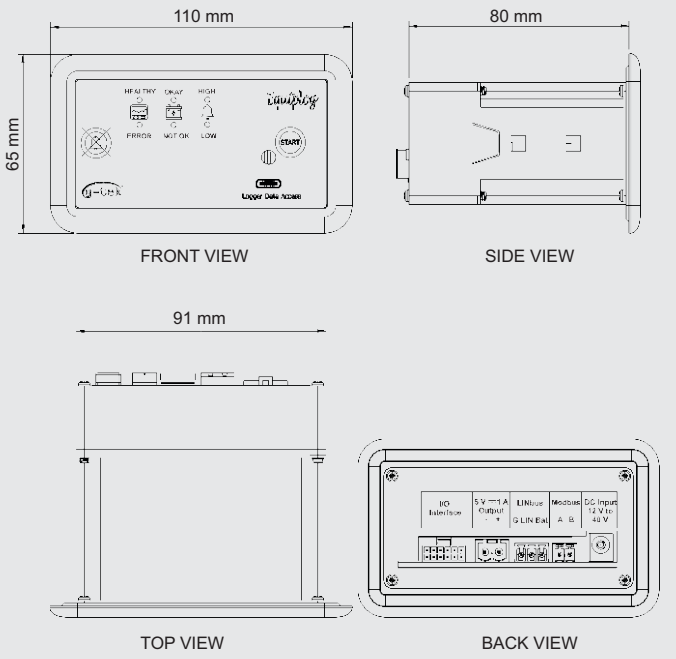
*:Current alarm settings are pre-fixed from factory as per requirements of WHO/PQS/E006/DS01.2. Other settings are available on request. The Recommended condition is defined as per clause no. 4.2.6 of WHO/PQS/E006/DL01.2 specification protocol.

Select your ORDER Code: 9 9 9 4 X

Example ORDER Code: 9 9 9 4 2

Code	Description
3 :	Level-1: Data Logger with M2M Interface
2 :	Level-2: Integrated EMD with Local communication
1 :	Level-3: Integrated EMD with Local and remote communication
9 :	Level-3: Integrated EMD with Local and remote communication (GSM International Add ON)

Overall Dimension:



NABL ISO/IEC 17025:2017

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MANAGEMENT SYSTEM CERTIFICATION DNV ISO 9001-ISO 14001

Dealer / Representative

The specifications given above are an overview, and may be or may not be available in all product variants, or at an additional cost. The company reserves the right to change the specifications without prior notice, as the company follows a continual improvement philosophy for its products.

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Manufacturers of :

- Circular Chart Recorders
- Inkless Recorders
- Paperless Recorders
- Scanners & Data Loggers
- Networked Data Loggers
- Application Software
- WHO PQS Qualified Data Loggers
- Vaccine Series Data Loggers

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