GUBECLOUD Service

Your Always-Connected Data Logger

1. GUBECloud: Your data in real time, anywhere in Europe

GUBECloud is the service that transforms your data logger into a powerful remote monitoring platform. You'll no longer need to visit the site to download data or check the machine's status: you'll have everything under control from your smartphone or office PC. Whether your site is just round the corner or on the other side of Europe, the connection is guaranteed, secure and hassle-free.

2. One subscription, zero worries (The Basic Plan)

We have created a transparent 'All-Inclusive' package with no hidden costs.

- **Fixed monthly service fee**.
- **European connectivity included.**
- **Total flexibility**.
- **Data updates**.

3. The GUBECloud Dashboard (Your data, organised)

By accessing the web portal or mobile app, you'll find an intuitive dashboard, pre-configured to give you a clear and immediate overview.

Standard Dashboard Included: View the performance and history of your sensors, conveniently organised into thematic groups:

- **GPS:** Position tracking.
- **IMU:** Inertial data (acceleration, tilt).
- **Digital:** Status of digital inputs (frequency inputs).
- **Analogue:** Graphs and values of analogue sensors (0-5V and 4-20mA).
- **CAN:** Data read directly from the on-board CAN bus.
- **Alarms:** The emergency control panel, which includes 4 programmable alarms within the data logger.
- **Extra Service:** Custom Dashboard Design

4. Alarms and Notifications (Never miss an anomaly)

The data logger independently manages up to 4 hardware alarms. When GUBECloud detects that one of these alarms changes status (activates or deactivates), it intervenes to alert you.

- **Push & Email Notifications Included**
- **Extra Service: Cloud-Side Automations**

5. Data History and Reporting (The true value of memory)

GUBECloud doesn’t just show you the present; it stores the past to help you make better decisions.

- **Secure Archive**.
- **Automatic Reports (Weekly and Monthly)**
- **Manual Export**

Chapter 1: How to use the GUBELOG-01

GUBECLOUD Service can be configured in two ways: **“STAND ALONE CLOUD** MODE” and **“PC AS GATEWAY**”.

STAND ALONE CLOUD MODE:

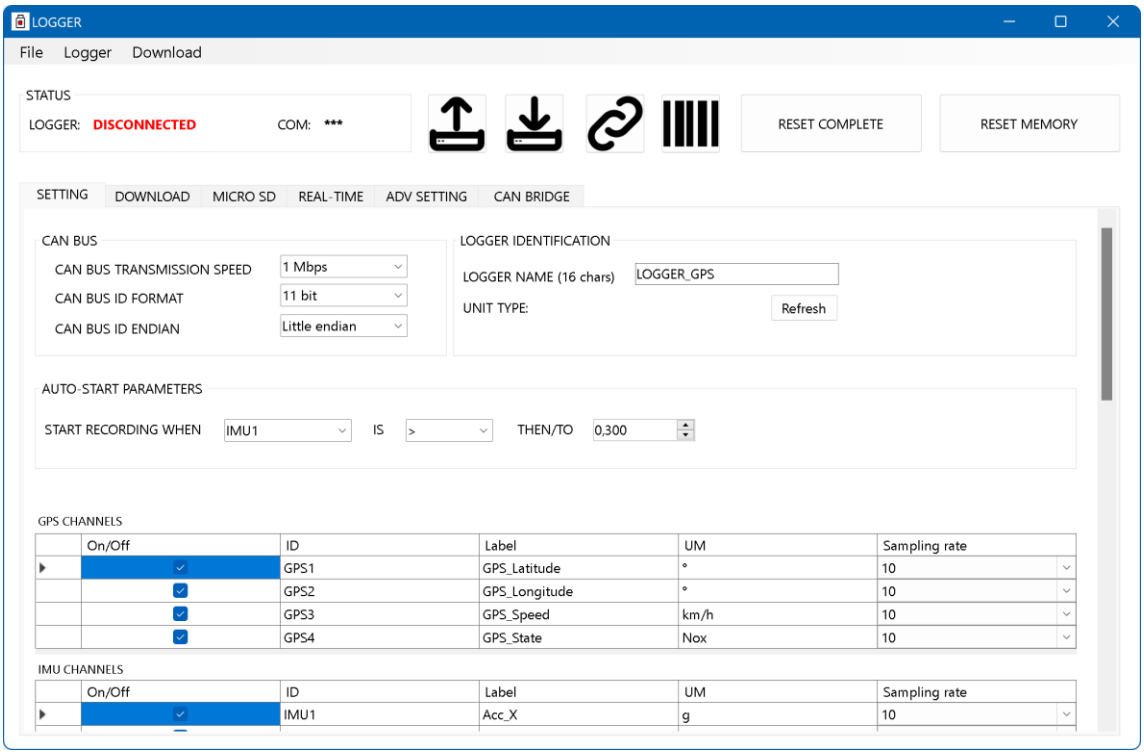
In this mode, once configured, the data logger starts up, connects automatically to the local WiFi network and begins sending data to the cloud. All this happens autonomously without any intervention. In this case, data is recorded on the cloud whilst no recording takes place locally.

PC AS GATEWAY:

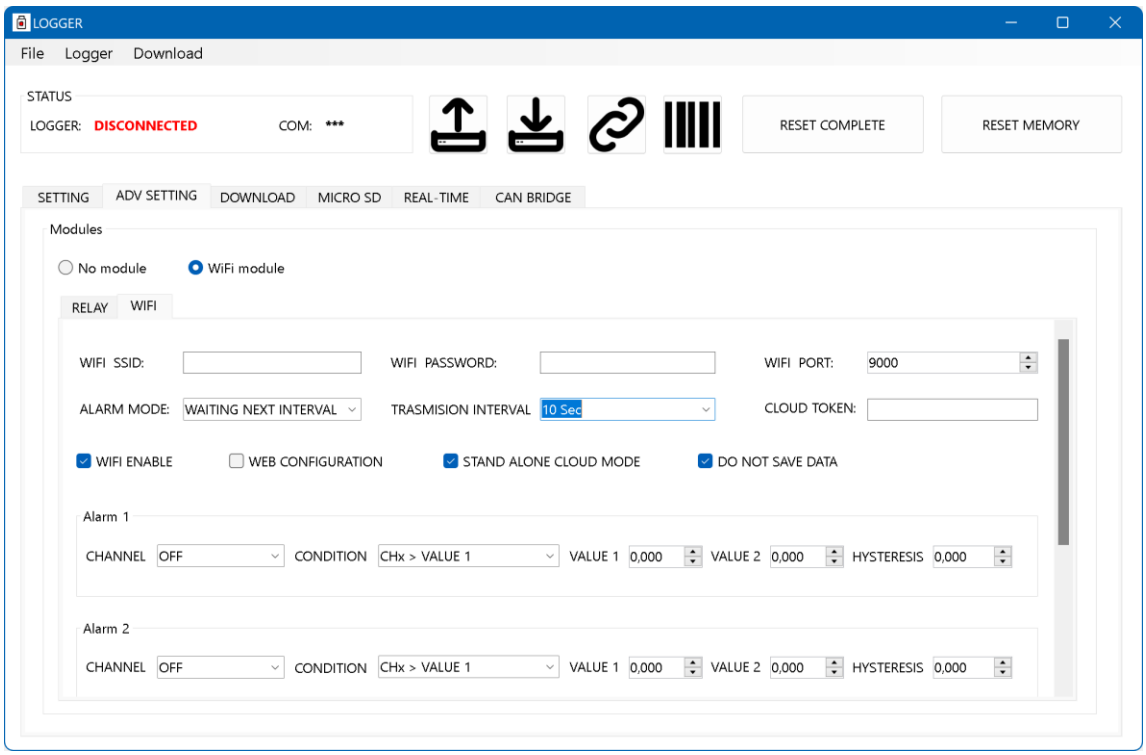
In this mode, once configured, the data logger starts up, connects automatically to the local WiFi network and begins sending data to the TCP port (specified in the settings). GUBELLINI DataStudio (specifically the WIFI LINK window) will send the data to the cloud. In this case, the data logger may or may not record data locally on the micro SD card (depending on the selected settings). The GUBELLINI DataStudio software must remain active on a PC connected to the same local Wi-Fi network (and will act as a ‘bridge’ between the data logger and the cloud).

Chapter 2: How to configure the GUBELOG-01

In both cases, the data logger must be configured to detect the inputs you wish to monitor via Wi-Fi. Configuration is carried out via GUBELLINI DataStudio and the LOGGER window (as indicated in Chapter 2 of the user manual):



From the “LOGGER” window, in the “SETTING” tab, you must enable and configure the inputs you wish to monitor via Wi-Fi (or via the CAN-NBIoT module). For each one, you will need to set the configuration parameters, such as sampling rate, multiplier, offset, etc.



Once you have configured the inputs and CAN bus options (if required), proceed to configure the Wi-Fi module and alarms. The configuration changes if you decide to enable **"STAND ALONE CLOUD** MODE" and **"PC AS GATEWAY"**.

STAND ALONE CLOUD MODE: make sure you follow these steps:

- Set the name of your local network in WIFI SSID.
- Set your local network password in WIFI PASSWORD.
- Leave the TCP port number blank in WIFI PORT. The default value is 9000.
- Set TRANSMISSION INTERVAL to define the time interval between the various data packets travelling to the cloud.

NOTE: GUBECLOUD Service has a traffic limit (if you are using the NB-IoT / LTE module). This means that if you use Wi-Fi, there are no traffic issues. If you are using the CAN NB-IoT / LTE module, you must select a TRANSMISSION INTERVAL of 60 seconds or more.

- Tick (enable) the WIFI ENABLE flag.
- Tick (enable) the STAND ALONE CLOUD MODE flag.
- In this mode, you cannot choose whether or not to save data locally. Ticking the DO NOT SAVE DATA box does not affect the datalogger's behaviour.

NOTE: When you tick the DO NOT SAVE DATA mode, the data logger will start up as usual and begin recording data as usual (creating the data dataset with the sequential number). However, after 15 readings, the logger will stop recording to the micro SD card. All other functions (Wi-Fi, alarms, relay commands, digital outputs, etc.) will continue to operate normally. This ensures that the SD memory does not fill up with data you are not interested in and does not hinder the normal operation of the device.

- Set the alarms (1 to 4) by selecting the relevant input and setting the conditions under which the alarm should be triggered.

NOTE: Alarms 1 and 2 are shared with the digital outputs, which could be used to manage automations or control relays.

Once the Wi-Fi module has been configured, all you need to do is save the configuration (via the File > Save Configuration menu) and send the configuration to the data logger (via the Logger > Send configuration to logger menu or by clicking the '  ' button). Once switched on, the logger will automatically connect to the Wi-Fi network and send data from all connected inputs to the cloud.

PC AS GATEWAY mode: make sure you follow these steps:

- Set the name of your local network in WIFI SSID.
- Set your local network password in WIFI PASSWORD.
- Set the TCP port number in WIFI PORT. The default value is 9000. Leave it unchanged unless it is already in use by another service.
- Tick (enable) the WIFI ENABLE box.
- Uncheck (disable) the STAND ALONE CLOUD MODE flag.
- Decide whether or not to save data locally. Tick (enable) the DO NOT SAVE DATA box if you do not wish to save data locally to the micro SD card.

NOTE: When you tick the DO NOT SAVE DATA option, the data logger will start up as usual and begin recording data as normal (creating the data dataset with the sequential number). However,

after 15 readings, the logger will stop recording to the micro SD card. All other functions (Wi-Fi, alarms, relay commands, digital outputs, etc.) will continue to operate normally. This ensures the SD memory does not fill up with data you are not interested in and does not hinder the normal operation of the device.

- Set the alarms (1 to 4) by selecting the relevant input and setting the conditions under which the alarm should be triggered.

NOTE: Alarms 1 and 2 are shared with the digital outputs, which could be used to control automation systems or drive relays.

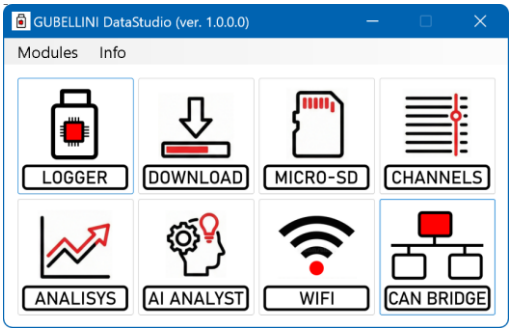
NOTE: The Wi-Fi settings (such as the alarms and the 'DO NOT SAVE DATA' flag) also apply to the external CAN-NBIoT module

Once the Wi-Fi module has been configured, all you need to do is save the configuration (via the File > Save Configuration menu) and send the configuration to the data logger (via the Logger > Send configuration to logger menu or by clicking the '  ' button). Once switched on, the logger will automatically connect to the Wi-Fi network and send data from all connected inputs to the TCP port. GUBELLINI DataStudio (via the WIFI LINK window) will be able to intercept the data and send it to the cloud.

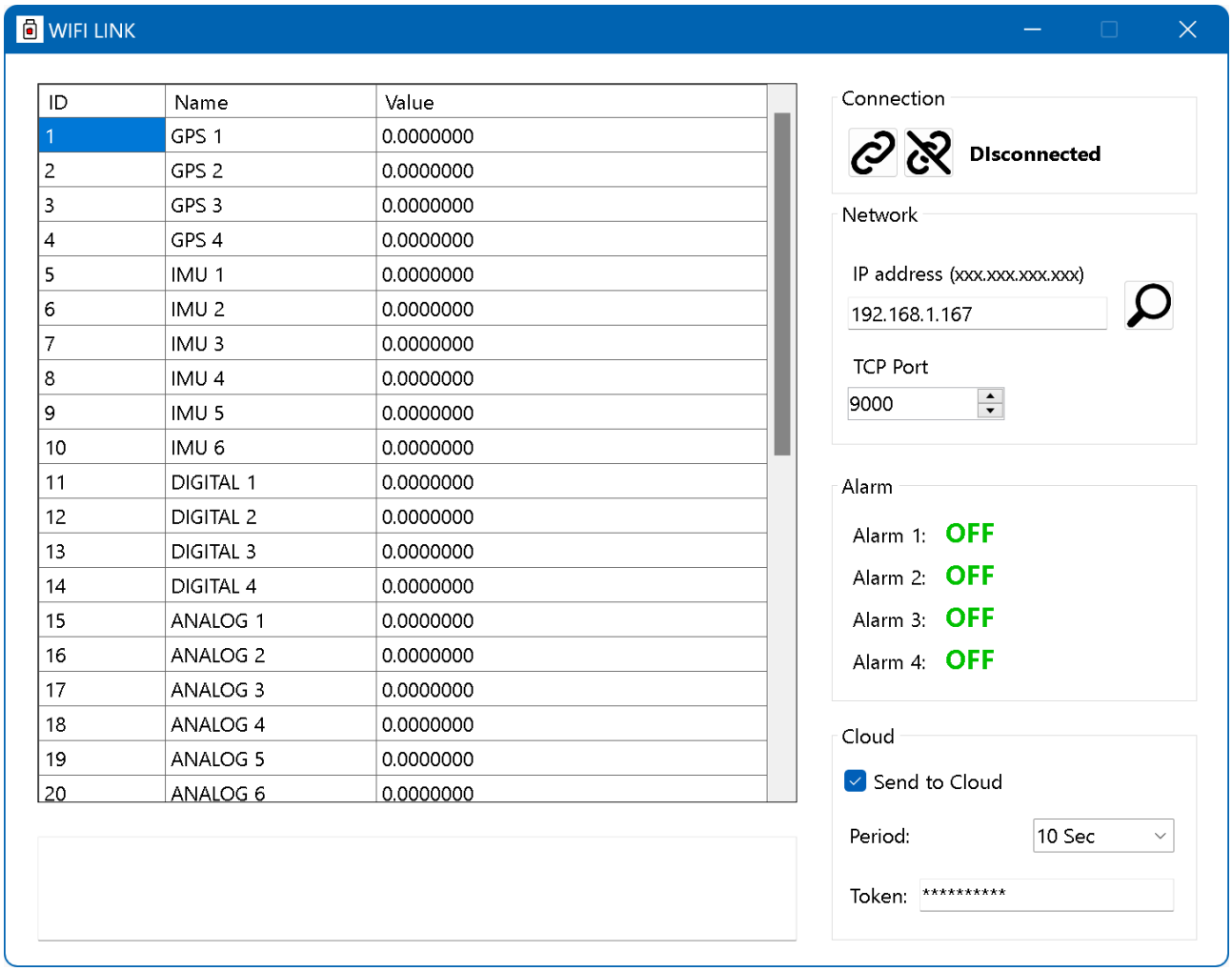
Chapter 3: How to connect the GUBELOG-01 to WIFI LINK (by GUBELLINI DataStudio)

If you have configured the WIFI module in “PC AS GATEWAY” mode, the data logger will attempt to connect to the local network you have set up and will attempt to establish communication on the TCP port. The first time this may take longer, whilst subsequent attempts will only take a few seconds.

NOTE: Connecting to Wi-Fi does not guarantee data transmission to the cloud.



From the main window of GUBELLINI DataStudio, click on **WIFI** to open the **WIFI LINK** window. To connect **WIFI LINK** to the data logger, click on the search button ( ) until the data logger’s IP address is returned. Once the IP address has been found, click on the connect button ( ) to connect. From that point onwards, you will be able to view the values of the datalogger’s enabled inputs and alarms in real time.



If you wish to send data to the cloud via WIFI LINK, follow these steps:

- Set the time interval (“Period”) to the frequency at which you wish to send data to the cloud.

NOTE: Please note that the Cloud platform accepts a maximum amount of daily data. Once the limit is reached, the cloud will remain frozen until the following day. Set a reasonable value, consistent with your monitoring activity.

- Set the “Token” that we will provide you with as a unique password to identify your data logger. Each data logger will be associated with a token.

NOTE: if you need to manage multiple data loggers transmitting over the Wi-Fi network, you can open GUBELLINI DataStudio multiple times (so as to have several Wi-Fi Link instances available). Each instance will be connected to a single data logger (with a dedicated TCP port number).

- Tick the “Send to Cloud” box to start transmitting data to the cloud.

Chapter 4: GUBECLOUD Service

Whether you have configured the data logger as STAND ALONE CLOUD MODE or as PC AS GATEWAY, GUBECLOUD Service will offer you the same services.

Your system wherever you are: Web and Mobile

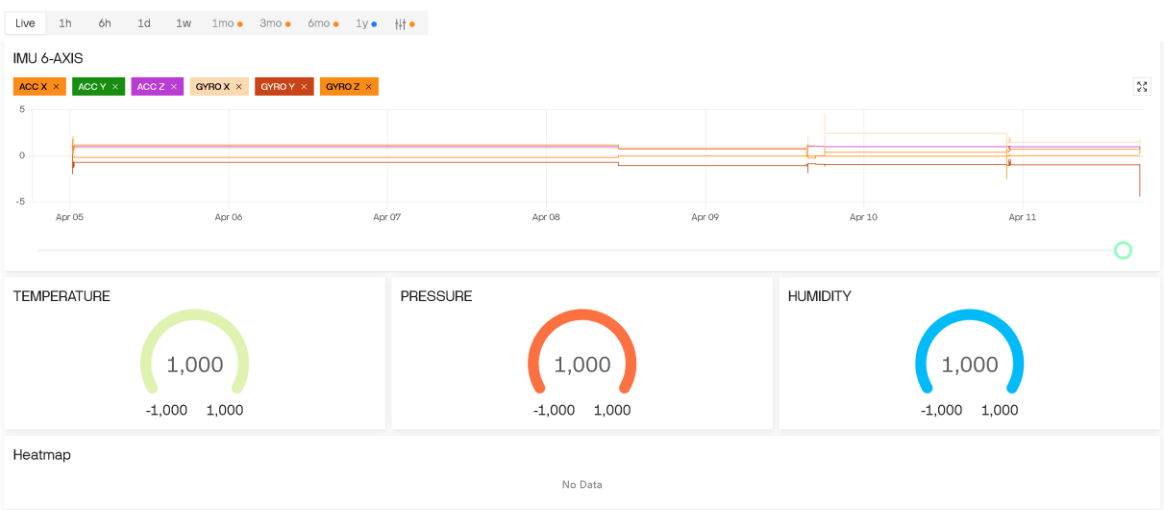
To ensure maximum operational flexibility, GUBECLOUD Service has been developed as a multi-platform ecosystem. The service is accessible at any time via two tools that are perfectly synchronised with each other:

- **Web Console (Browser Access):** A powerful and comprehensive desktop portal, ideal for the control room. It offers an overview of your devices, in-depth analysis of historical graphs and tools for exporting data.
- **Dedicated Mobile App (Smartphones and Tablets):** Your system literally in the palm of your hand. A responsive, optimised app for checking vital parameters on the go and receiving real-time alerts (via push notifications) even when you're travelling.

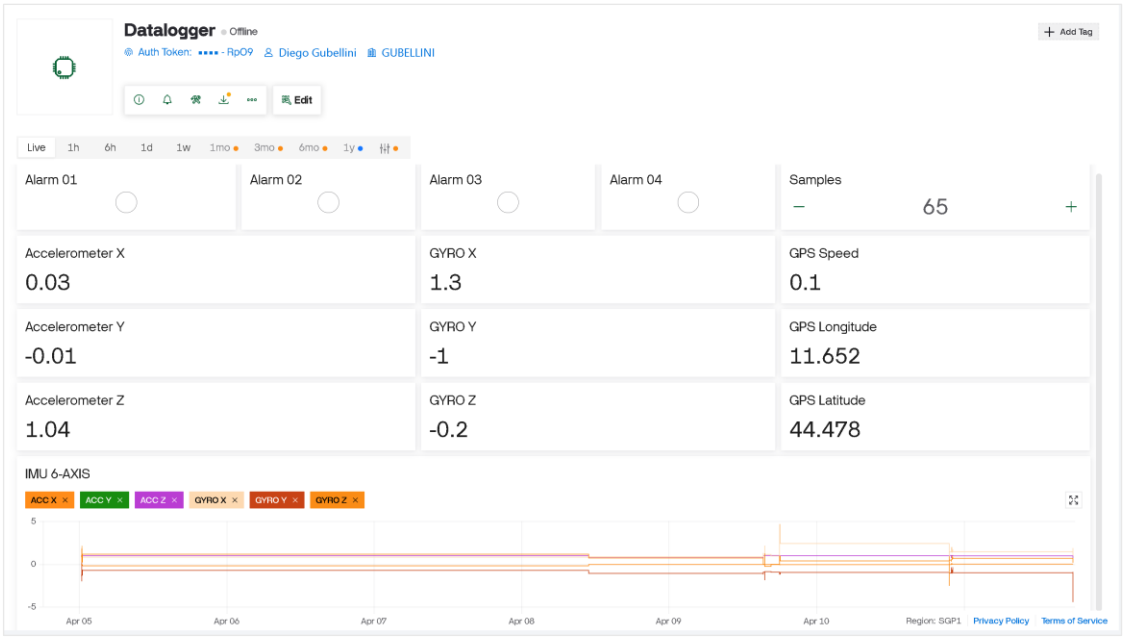
Key Features

The architecture of GUBECLOUD Service is packed with tools designed to make the work of operators and technical managers easier:

- **Dashboard:** Clear and intuitive graphical interfaces. Raw data is instantly transformed into easy-to-read needle gauges, numerical values, status indicators and line graphs.



- **Notification and Alarm System:** There is no need to stare at the screen all day. GUBECLOUD Service constantly monitors critical parameters and, in the event of anomalies (e.g. an alarm threshold being exceeded), immediately sends push notifications directly to your smartphone or via email.
- **Data Logging and Export:** All measurements read from the devices are securely stored in the Cloud. You can browse the log to analyse past operating trends or export the logs in tabular format (CSV) for further business processing.



- **Multi-level User Management:** You can invite your staff or operators to the platform, assigning them specific roles and restricting access only to the devices under their responsibility.

Security and Reliability

GUBECLOUD Service is based on high-performance servers that guarantee real-time connectivity and minimal latency. All data traffic between your hardware, the Cloud and the user interfaces is protected by advanced encryption protocols, ensuring that your sensitive information and operational commands remain private and inaccessible to third parties at all times.

Initial Configuration: Setting Up the Dashboard

Upon activation of **GUBECLOUD Service**, the first essential step is to customise your interface. The hardware installed on the machine collects dozens of raw electrical signals; during this configuration phase (‘Onboarding’), we will assign each signal a meaning, a name and a visual representation, building bespoke Web and Mobile dashboards for you.

To proceed with the setup, you will be provided with a configuration form to complete. Here is how your control panel will be structured and what information we will ask you to define:

1. The Log of Inputs and Alarms

To convert the machine’s signals into readable information, we will ask you to complete the list of channels used, specifying the following for each one:

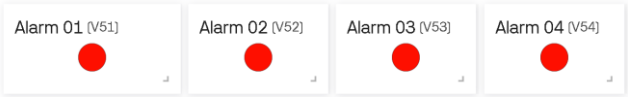
- **Descriptive Name:** The clear name of the input (e.g. *‘Main Pump Pressure’*, *‘Furnace Temperature’*, *‘Conveyor Speed’*).
- **Unit of Measurement:** The symbol associated with the value (e.g. *Bar, °C, RPM, %*).
- **Minimum and Maximum Values (Scale):** The typical operating range of the sensor (e.g. 0 to 100). This data is vital for correctly scaling the graphs and the pointers.
- **Identification Colour:** A colour of your choice to identify that specific parameter at a glance within the overlaid graphs.

The same logic applies to **the 4 Digital Alarms** managed by the system, to which a descriptive name must be assigned (e.g. *"Thermal Lockout"*, *"Emergency Stop Button Pressed"*).

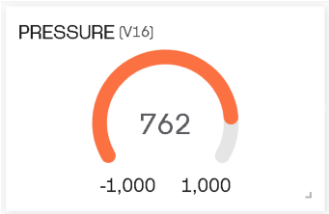
2. Dashboard Structure (Visual Layout)

Based on your specifications, our technicians will configure your interface (both on the web portal and the mobile app) by including the following visual tools by default. For each of these elements, we will ask you to **select which inputs you wish to display**:

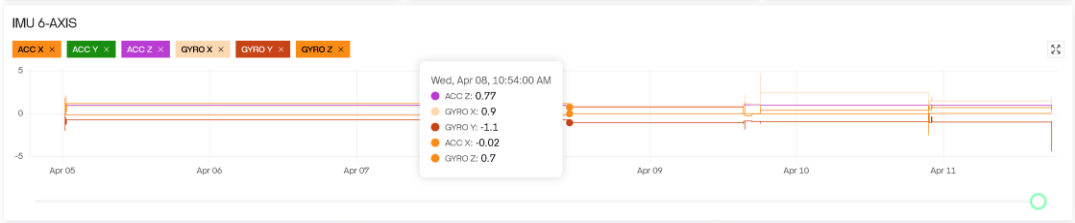
- **Alarm Panel (4 LEDs):** A dedicated section with 4 indicator lights showing the real-time status of machine alarms.



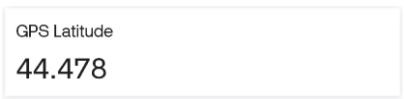
- **Gauges (Up to 4):** Dial-type instruments for the most critical parameters. You will need to choose up to 4 inputs to highlight with this instrument, which will change colour as it approaches the set maximum value.



- **Historical Charts (Up to 4):** Interactive time windows for trend analysis. You can configure up to 4 separate charts; within each chart, you can group **up to 6 different channels** (e.g. a chart dedicated solely to temperatures, one to pressures, etc.).



- **Text Values (Label):** A comprehensive, organised list displaying the instantaneous numerical value and unit of measurement for *all* active inputs in real time.



- **Satellite Tracking (Map):** If your hardware is equipped with a GPS module, an interactive map will be integrated to display the exact location.

3. Notification Management

The system works for you even when you're not looking at the screen. We'll ask you to provide **a primary email address** to which the platform will send notification messages should any of the machine's 4 hardware alarms be triggered. For notifications and to set up the service, you'll need:

1. **Customised email messages:** It is not enough to know that Alarm 1 has triggered. We want to send you *the exact text* you wish to receive in the email subject line (e.g. *"ATTENTION: Abnormal shutdown of press on line 2"*). A specific text for each alarm.
2. **Time Zone and Date Format:** If you are also selling the modules abroad, it is essential to specify the time zone where the machine is installed. The cloud's historical graphs save data in absolute UTC format: if the dashboard does not have the correct time zone set, an event that occurred at 14:00 will be shown on the graph at 13:00 or 15:00, causing confusion for the customer during technical analysis.

Copy and paste the following text and fill it in to activate the cloud service

INITIAL CONFIGURATION FORM – GUBECLOUD Service

Dear Customer,

In order to set up your customised interface (Dashboard) on GUBECLOUD Service, please complete all sections of the following form. The information provided here will enable us to convert the raw signals from your machinery into ready-to-use charts, indicators and alerts.

1. CUSTOMER DETAILS AND GENERAL SETTINGS

Please complete the following details to ensure the device is correctly linked and the server is set up.

- **Company Name:** _____
- **Name of Technical Contact:** _____
- **Machine ID (e.g. Press 01):** _____
- **Email Address for Receiving Alarms:** _____
- **Installation Time Zone:** [ ] Rome/Europe (CET/CEST) [ ] Other: _____
- **Preferred Date Format:** [ ] DD/MM/YYYY [ ] MM/DD/YYYY

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2. INPUT REGISTER (Measurements and Sensors)

Please list below the signals/sensors that the machine will transmit to the Cloud. For each channel used, please specify a clear name, the unit of measurement, the minimum and maximum values (required to calibrate the graphs) and a preferred colour.

(If there are not enough channels, add rows to the table).

Channel	Descriptive Name (e.g. Oven Temperature)	Unit of Measurement (e.g. °C, Bar, RPM)	Minimum Value	Maximum Value	Preferred Colour
1: AN2	Oven temperature	°C	20	400	Red
2					
3					
4					
5					
6					
7					
8					
9					

Channel	Descriptive Name (e.g. Oven Temperature)	Unit of Measurement (e.g. °C, Bar, RPM)	Minimum Value	Maximum Value	Preferred Colour
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

3. ALARM LOG (Critical Events)

The system supports up to 4 emergency alarms. For each alarm, enter the name that will appear on the Dashboard and the exact text you wish to receive in the subject line of the notification email.

Alarm	Name on the Dashboard (e.g. Motor Block)	Notification Email Text (e.g. WARNING: Motor Blockage Line 1)
AL 1		
AL 2		
AL 3		
AL 4		

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4. CUSTOMISATION OF THE GRAPHICAL INTERFACE (Dashboard)

Based on the inputs specified in point 2, please indicate how you wish to display them on your Web and Mobile platforms.

A. Text Values (Instant Readout)

By default, all active inputs will be displayed as a text list (Name and Value). If you wish to EXCLUDE certain channels from this list, please specify them here:

- Channels NOT to be displayed in text format: _____

B. Gauges (Gauge - Needles)

You can choose up to **4 inputs** to highlight using gauge dials. Specify the channel number (e.g. Channel 1, Channel 3):

1. Gauge A: Channel No. ___
2. Gauge B: Channel No. ___
3. Gauge C: Channel No. ___
4. Gauge D: Channel No. ___

C. Historical Charts (Trend Analysis)

You can create up to **4 separate chart panels**. Within each chart, you can group up to a maximum of **6 channels** (useful for comparing, for example, different temperatures on the same chart).

- **Chart 1** - Panel Title: _____
  Channels to include (e.g. 1, 2, 3): _____
- **Chart 2** - Panel Title: _____
  Channels to include: _____
- **Chart 3** - Panel Title: _____
  Channels to be included: _____
- **Chart 4** - Box title: _____
  Channels to be included: _____

D. Alarm Indicators (LEDs)

Four indicator lights corresponding to the alarms defined in Point 3 will be automatically displayed on the dashboard.

E. Satellite Tracking (GPS Map)

Does your machine need to display its position in real time on an interactive map?

- [ ] YES (Requires GPS hardware to be installed)
- [ ] NO

Signature of Contact Person for acceptance: _____ **Date:** __ /__ / ____

(Please complete and return this form by email to your technical contact to initiate the Cloud activation process).

GUBELLINI s.a.s. of Diego Gubellini & Co.

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