The Ambrosus integrated gateway is a low-energy battery-powered gateway specifically designed to collect, secure and process data from smart devices and smart sensors, before providing this information to AMB-NET.

FEATURES

**COMPUTING CAPABILITIES**
Edge computing for more intelligence and efficiency

**SECURE BY DESIGN**
Communication with the highest encryption

**FLEXIBLE, CUSTOMIZABLE**
Special design depending on use. Fixed, hand-held anti-counterfeiting attributes

**AUTOMATIC AIRPLANE MODE**
Automatic switch to airplane mode

**SIMPLE SETUP**
Easy provisioning available through mobile apps

**COMMUNICATION MODE**
Various encrypted protocols and mesh-network available
The smart device is recording environmental data. When prompted, it is able to share its data using a dedicated low-energy protocol.

The gateway automatically prompts and collects the data from the smart device. It can process it for smart data analysis and can interact with several smart devices at a time.

The collected data is then transmitted to AMB-GATE-API, which collects, stores and saves them to AMB-CHAIN, the core blockchain. The information can enter and exit AMB-GATE for customer purposes.

### TECHNICAL DATA

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positioning</td>
<td>Accuracy up to 10m</td>
</tr>
<tr>
<td>Communication protocol</td>
<td>WiFi / 3G</td>
</tr>
<tr>
<td>Connectivity</td>
<td>Customizable, from 1/min to 1/week</td>
</tr>
<tr>
<td>Power source</td>
<td>On battery or plugged</td>
</tr>
<tr>
<td>Autonomy</td>
<td>Depends on the sampling, the connection frequency and the power source</td>
</tr>
<tr>
<td>Positioning option</td>
<td>Through GSM antenna, embedded into the Gateway</td>
</tr>
<tr>
<td>CE Certification</td>
<td>Under evaluation</td>
</tr>
</tbody>
</table>
MODULAR GATEWAY / CUSTOMIZABLE

The gateway is customizable depending on the type of sensor/device plugged into its entry.

DEVICE CONNECTION

More than one device can be connected to each gateway.
ARCHITECTURE SOLUTION

NETWORK FEATURE
Gateways have network capacities, allowing them to share information amongst them (positioning, airplane mode, security, computing).

NETWORK MESHING
Gateways can form a mesh network, where the information gathered from the sensor transits through several gateways, before making its way to AMB-NET.

SIDE-CHAIN
Gateways can connect with each others to form a small Blockchain, thus securing data until a connection to AMB-NET becomes available.
PROVISIONING APP SPECIFICATIONS

SET-UP, INITIALIZATION OF THE GATEWAY

- Connect smart devices to the gateway
- Organize and set-up Mesh-network/Side-chain of the gateway
- Set-up data collection
- Set-up connectivity for data collection and data push
- Set-up WiFi password
- Set-up private key
- Set-up computing parameters

VISUALIZATION OF DATA

- Visualize real-time monitoring
- Visualize data traffic
- Visualize the state of the gateway

DEMO APP

Coming soon.