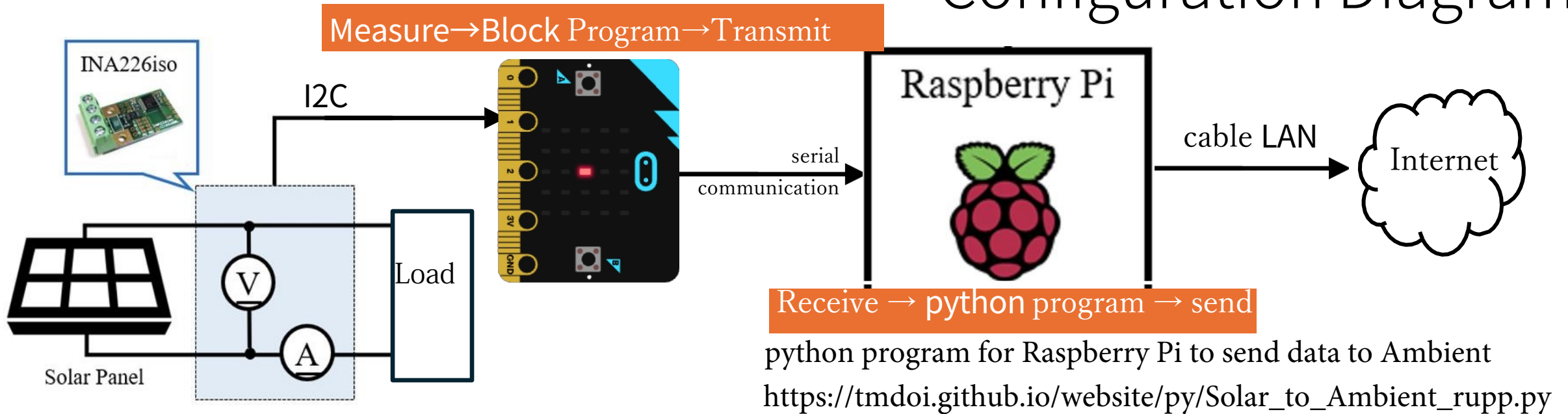


IoT Data Visualization Service Ambient Exercise

DX Experiment of Electronics and Intelligent
Informatics course for 2nd grade
ver2023.11.26 Tomoharu Doi

2. Understanding Ambient (2) IoT System Configuration Diagram



Program for microbit to measure Volt. and Current.
https://makecode.microbit.org/_RuUY2cdUULge

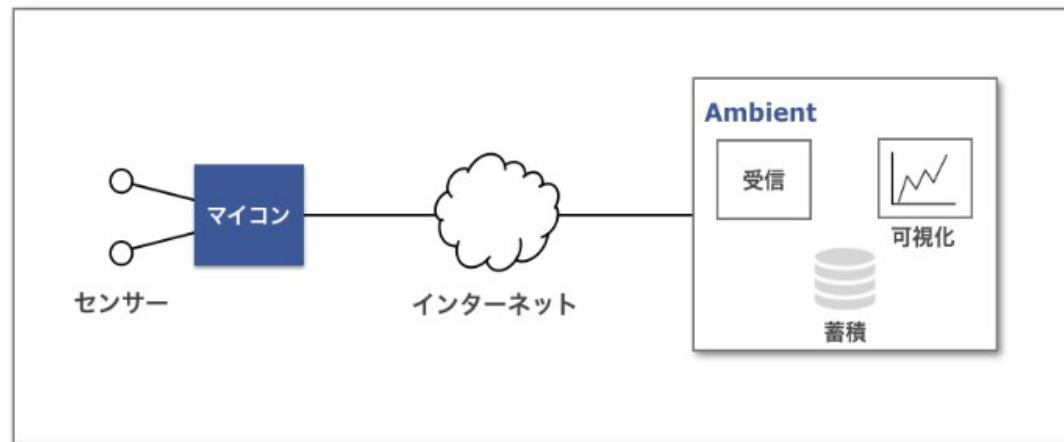


Get an overview of Ambient (1)

1. Login→Documents→Tutorial
2. Open the tutorial Top "Using Ambient".
 1. <https://ambidata.io/docs/gettingstarted/>

Ambientを使ってみる

AmbientはIoT用のクラウドサービスです。マイコンから送られたセンサーデータを受信し、蓄積し、可視化(グラフ化)します。このページではAmbientの使い方を説明します。



2. Channel generation ①: Restriction

1. Select Channels List at the top of the browser → Channels List

The screenshot shows the Ambient web interface. At the top is a dark blue header with the 'Ambient' logo, navigation links for 'チャンネル一覧' and '換気良好マップ', and utility links for 'ドキュメント', 'お知らせ', and a user profile 'tmdoi@omu.ac.jp'. Below the header, the user ID '547956928a774c69fb' is displayed. The main content area features a table with columns: 'チャンネル名', 'チャンネルID', 'リードキー', 'ライトキー', 'ダウンロード', 'データ削除', and '設定'. Below the table are two buttons: 'チャンネルを作る' and 'デバイスキーを設定する'. At the bottom, the footer contains 'AmbientData Inc.' and links for '利用規約' and '会社概要'.

チャンネル名	チャンネルID	リードキー	ライトキー	ダウンロード	データ削除	設定
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チャンネルを作る デバイスキーを設定する

AmbientData Inc. 利用規約 会社概要

2. Channels / Data / Charts

1. Ambient's various specifications/limitations page
<https://ambidata.io/refs/spec/>
2. 1 free account -> 8 channels, 3000 data per channel **per** day = approx. every 30 seconds
3. Full utilization 8ch x 3000 data = 24,000 data can be sent **per** day
4. However, an interval of at least 5 seconds is required.
5. Data storage for 4 months

3. Data transmission ① Exercise on each person's PC

- Classroom Instruction > Week 2 Materials
 - Sign in- Click on Google Accounts
- Text created by a service called Google Colaboratory
 - From then on, follow the exercises as described on that page.
 - First, make a copy
 - Exercise on the copied page

