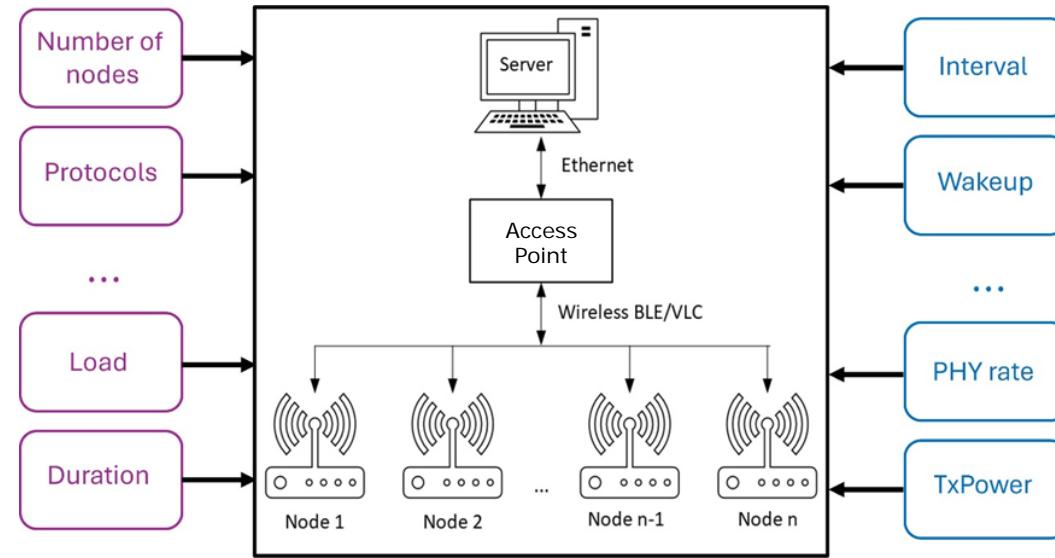
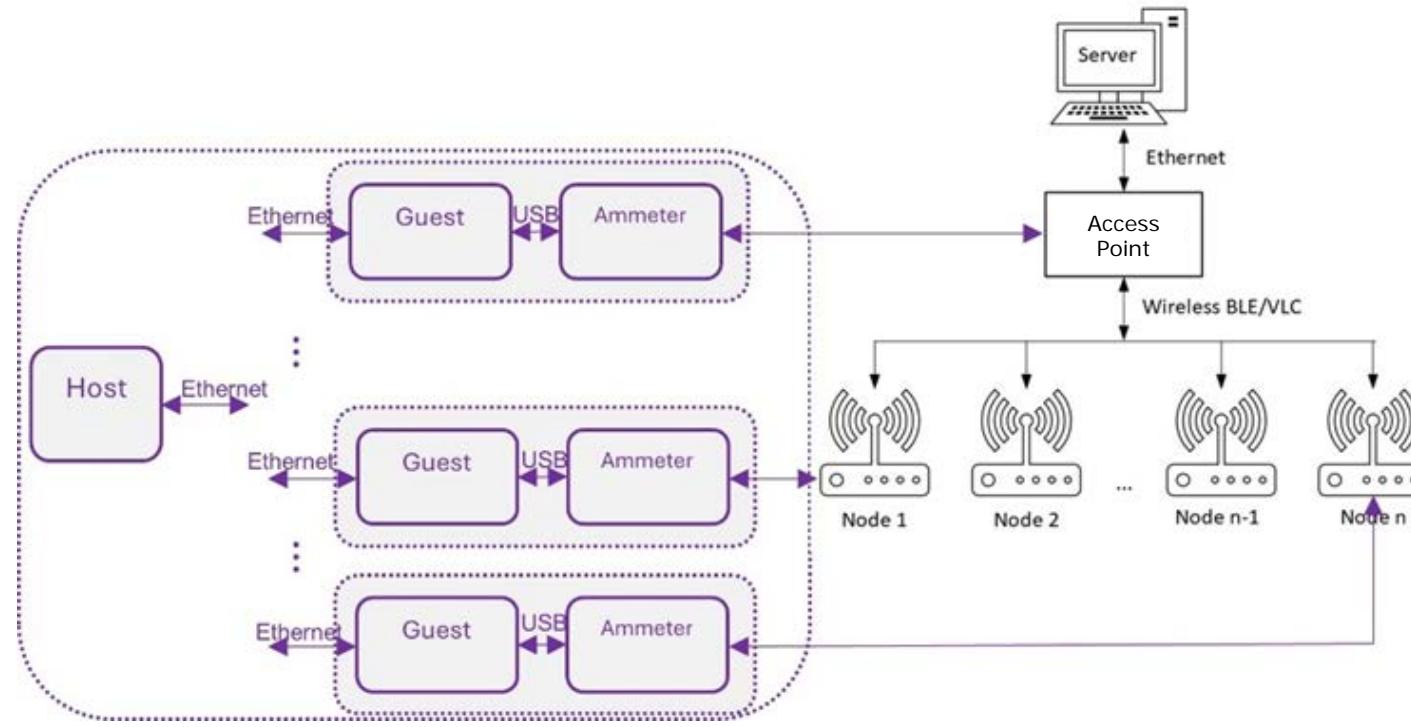


RIoT Network Energy Measurement and Analysis



Network-level factors and node-level factors influence on total energy consumption.

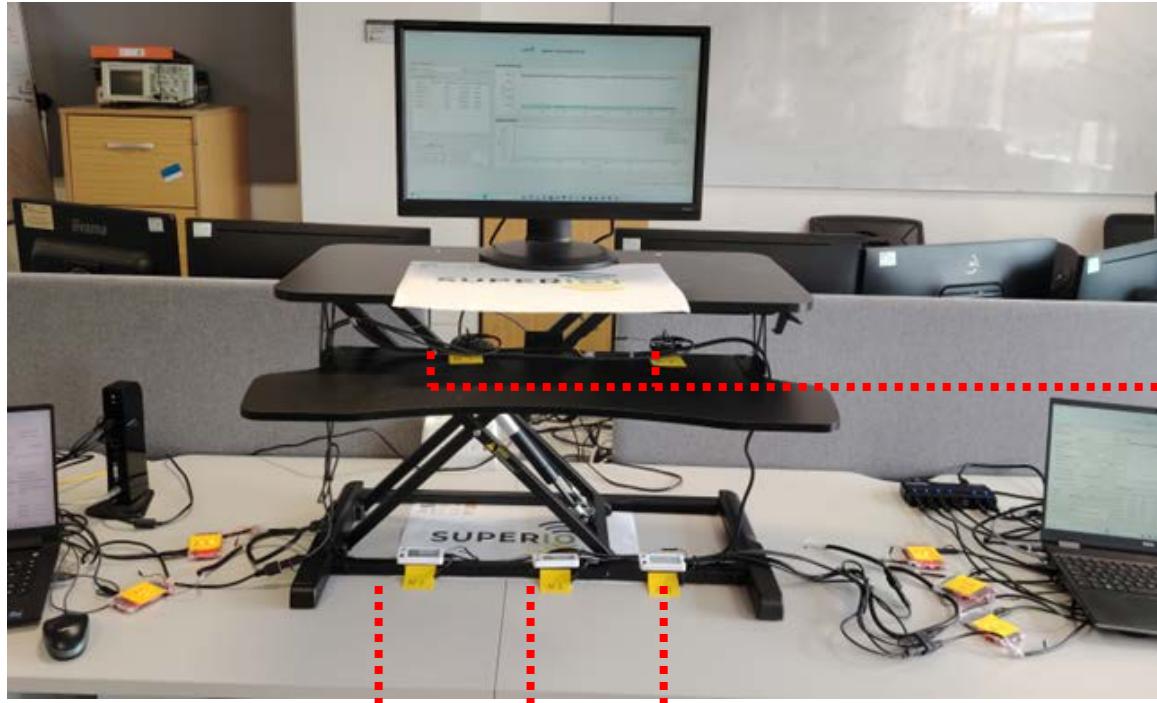
Energy Consumption Collection System



An Energy Consumption Collection and Analysis System.

- **Host PC & Application:** Collect nodes' data and stores datasets.
- **Guest PCs & Applications:** Collect local current readings and node factors (e.g., BLE/VLC settings) and send them to the host app.
- **Power Measurement Devices (PPK2 boards):** Measure current and send it to the guest app.

Actual IoT network energy measurement setup

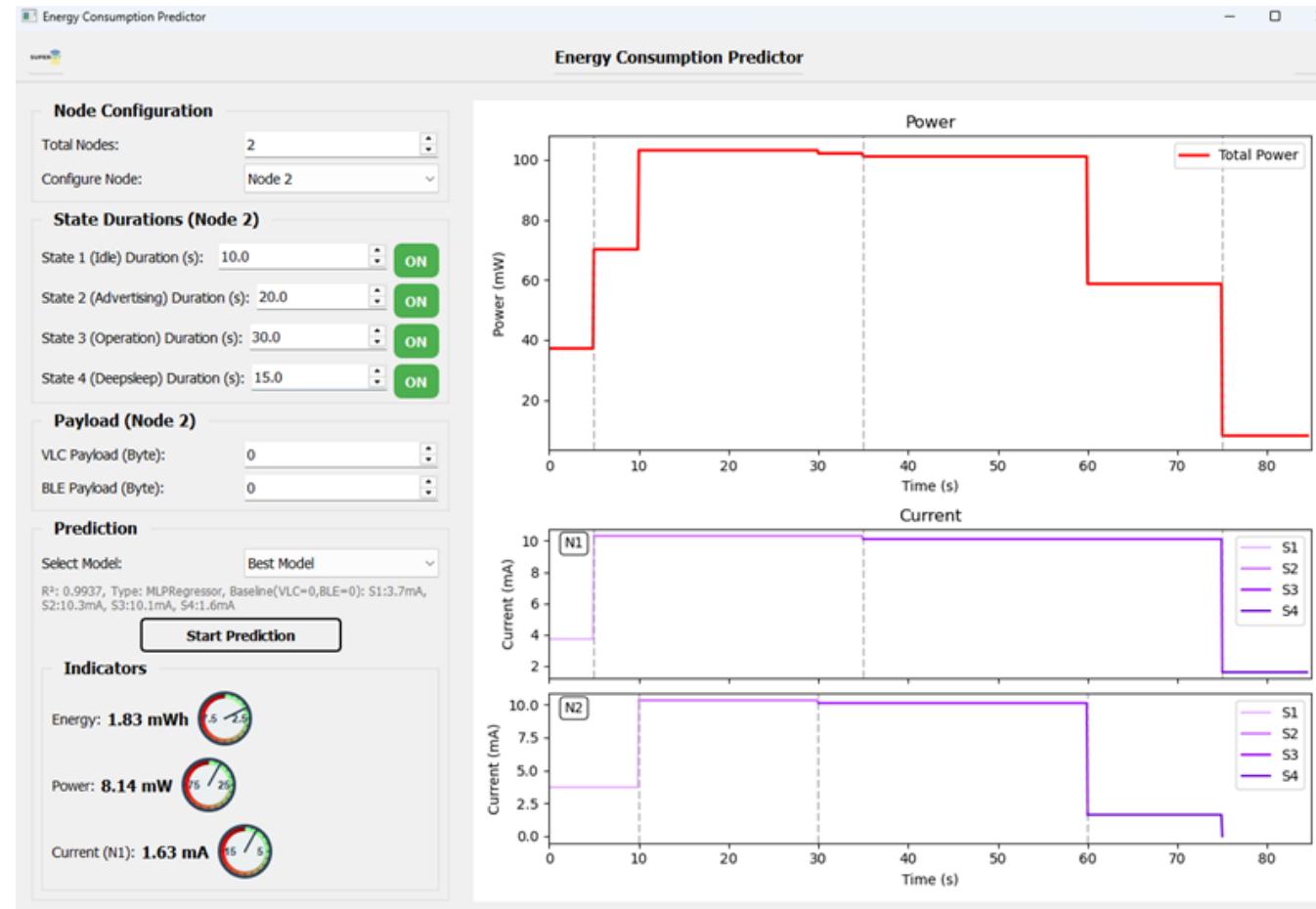


Access points

Nodes

Actual experimental IoT network energy measurement setup.

Energy consumption predictor



The interface of energy consumption predictor.