IoT-enabled Grid Monitoring and Management System for EV Chargers in Residential Applications

Project Group 08

Mohamed Haneen: TVE21EE088 Muhammed Shehin S: TVE21EE092 Neha V K: TVE21EE096 Sriram M: TVF21EF123

Under the Guidance of Prof. Sohan Placid John, Assistant Professor



Dept. of Electrical and Electronics Engineering College of Engineering Trivandrum

Methodology

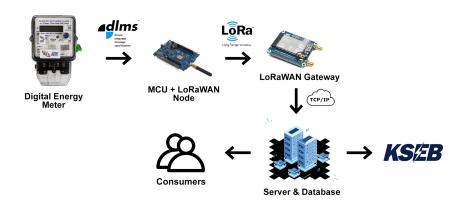


Figure: Proposed Model

Components

SI.	Component	Cost
No		
1	STM32F103C Microcontroller	₹649.00
2	SX1278 LoRa Module x2	₹800.00
3	Infrared Sensor	₹200.00
4	3.7V Li-ion Battery	₹500.00
5	Raspberry Pi Zero	₹1,649.00
	Total Cost	₹3798.00

Table: Component List

Work Plan

SI.	Task	Period	Status
No			
1	Literature review	Aug-Sept	Done
2	Hardware Procurement	Sept	Ongoing
3	Design and implement a	Oct	Ongoing
	prototype to collect en-		
	ergy meter data		
4	Design and implement a	Oct-Nov	To be done
	LoRaWAN gateway		
5	Create a backend server	Jan-Feb	To be done
	for data collection and		
	analysis		

Table: Project Work Plan

THANK YOU