

IoT Based Smart Fuel Meter

Prof. M. Nasiruddin¹, Sarvesh Gosavi², Soheb Ali³, Arif Ahmed⁴, Saif Khan⁵, Aniket Kapse⁶

Associate Professor, Department of Electronics & Telecommunication Engineering¹

Students, Department of Electronics & Telecommunication Engineering^{2,3,4,5,6}

Anjuman College of Engineering and Technology, Nagpur, Maharashtra, India

Abstract: *In recent days number of vehicle are increasing rapidly and specially most of the people are using fuel vehicle also the price of the fuel are continuously increasing now days, due to this most of the petrol pump owner cheated with there customer. When customer ask the petrol pump worker to fill the fuel pump then they will cheat with the customer by showing them wrong data or manipulating the fuel data. In order to counter this problem we have made a solution which will measure the exact amount of the fuel which filled into the tank and it will also show actual cost of the petrol which get filled in fuel tank. The proposed Smart Fuel Meter consists of a system for measuring the fuel quantity A mobile application is also provided that allows an end user to check the actual volume and cost of the fuel. This app will daily update the price of the fuel and the cost of the fuel will be calculated from the latest price of the fuel.*

Keywords: Internet of Things (IOT), ESP12E, Embedded System, Fuel meter, Fuel Fraud Detection

REFERENCES

- [1]. M Sandeep, K Sai kumar, K Sai Jagat, P Krsihna Rohit, Dr. S Venkatesulu, “Real Time Fuel monitoring and Theft Detection System using IoT” International Research Journal of Engineering and Technology (IRJET) Volume: 07, Issue: 03 ,Mar 2020
- [2]. Ashwini Patil, Priyanka Gadakh, Nikita Mali, Sayli Patil, Prof. M.G. Bhandar “Fuel Theft Detection Location Tracing using Internet of Things” International Research Journal of Engineering and Technology (IRJET) Volume: 06, Issue: 05 ,May 2019
- [3]. Ch. Mani Kumar, Dr.R.B. Choudary “Digital Fuel Measuring System with Distance to Zero and Fuel Fraud Indicator” International Journal of Scientific Research in Science and Technology(IJSRST) Volume: 03, Issue: 01, 2017
- [4]. Srinivas M, Shadakshari H L, Chetan Kumar K P, Vikram S J , Prof. Apoorvashree H L “Vehicle Fuel Theft Detection and Monitoring System” International Journal of Advanced Research in Science & Technology (IJARST) Volume 7, Issue 3, July 2020
- [5]. Heda Venkata Sai Ajith, Pinjala Sai Kiran “Fuel Theft Detection System” International Journal of Research in Engineering, Science and Management (IJRESM), Volume-1, Issue-10, October-2018
- [6]. Vijayakumar P., Ganesan V., Pratik Patwari, Rajnandini Singh, Sharmila A., Payal P. Tayade, R. Rajashree, M. Tamilselvi “IoT Based Smart Fuel Monitoring System” International Journal of Recent Technology and Engineering (IJRTE) Volume-8, Issue-2, July 2019
- [7]. A.Avinashkumar , U.Singaravelan, T.V.Premkumar, K.Gnanaprakash “Digital fuel level indicator in two-wheeler along with distance to zero indicator” IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE), Volume 11, Issue 2, Mar- Apr. 2014
- [8]. Mrs.Udayavalli.V , Mrs.M.Omameswari “Embedded System Based Intelligent Digital Fuel Gauge” International Journal of Electronics & Communication (IIJEC)” Volume 2, Issue 12, December 2014
- [9]. Awadhesh Kumar, Sandip Kumar Singh, “Digital Fuel Indicator in Two Wheelers” International Journal for Scientific Research & Development| Vol. 2, Issue 12, 2015 IJSRD
- [10]. Prof. Trupti K. Wable, Prof. Rajashree R. Shinde “GSM Based Digital Fuel Meter and Fuel Theft Detection using PIC Microcontroller” International Journal of Advanced Research in Science, Engineering and Technology (IJARSET) Volume 03, Issue 04 , April 2016

- [11]. Jaimon Chacko Varghese, BineshEllupurayil Balachandran “Low Cost Intelligent Real Time Fuel Mileage Indicator for Motorbikes” International Journal of Innovative Technology and Exploring Engineering (IJITEE) Volume-2 Issue-5, April 2013
- [12]. Praik Manu Chikne, Nikhil Sanjay Dalvi, Rajkumar Dayanand Rathod, Mankesh Ajay Bhagat, Prof. Nilam R. Kapre “Design and development of digital fuel meter indicator for 2 wheelersplender vehicle” International Journal of Innovation in Engineering Research and Technology [IJIERT] Volume 7, Issue 4, Apr.-2020
- [13]. Raveena A1, Deepa R2 “Fuel measurement Using Loadcell” International Research Journal of Engineering and Technology (IRJET) Volume: 04 Issue: 10 Oct -2017
- [14]. Mr. Vaibhav N. Ghenand, Mr. Achalprakash P. Choudhary, Mr. Dhiraj K. Shelke, Dr. Y. S. Angal “Model Based Design of Digital Fuel Indication System” International Research Journal of Engineering and Technology (IRJET), Volume: 05, Issue: 05, May-2018
- [15]. Er ShivamAsode, Mr.Siddhant Jaiswal “Real Time Fuel Estimation using Micro Controller and Android App” International Research Journal of Engineering and Technology (IRJET) , Volume: 07 Issue: 03 | Mar 2020
- [16]. Ruchitha D, Sarvesh Naik, Sadiq Abbasi, Deepak Singh, Rajnikanth K “Fuel Level Indication and Mileage Calculation using IoT” International Research Journal of Engineering and Technology (IRJET) Volume: 07 , Issue: 07 ,July 2020
- [17]. MeghaKudnar, MrunalHanamghar , Ashwini Sangave, Ajay Durkar, Prof Navnath S. Bagal “Digital Gasoline Indicator which shows accurate fuel/Gasoline in the tank” International Research Journal of Engineering and Technology (IRJET), Volume: 04 Issue: 12 | Dec-2017
- [18]. Prashant J. Mahajan, Kalyani V. Pagare “Smart Fuel Metering System” International Research Journal of Engineering and Technology (IRJET) Volume: 07 Issue: 05 May 2020
- [19]. Gauri A. Patil, Gayatri A. Patil, Priyanka S. Sangle, “IoT based Smart Vehicles for Fuel Consumption”, International Journal of Computer Applications(IJCA) Volume No. 181, Issue No. 32, Dec. 2018
- [20]. Aditya Jadhav, Sonali Shirsekar, Sahil Sankhe, Savita Lade “GPS-GSM Based Vehicle Monitoring & Smart Fuel Measurement System” International Research Journal of Engineering and Technology (IRJET), Volume: 05, Issue: 04, Apr-2018