

Rekapitulasi Proses Penerbitan Artikel Syarat Khusus

Pengajuan Jabatan Fungsional Lektor Kepala

“Microcontroller-Based Intravenous Fluid Monitoring System Design”

Journal of Applied Engineering and Technological Science (JAETS),

Vol 5, No. 2, 2024

pp. 649-660

Ir. Phisca Aditya Rosyady, S.Si., M.Sc.

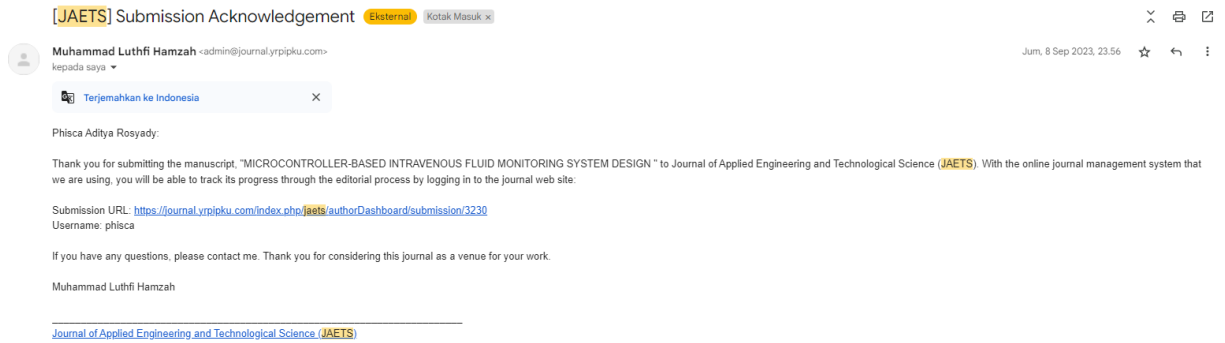
No	Keterangan	Tanggal
1	Submit Artikel	8 September 2023
2	Email mendapatkan respon dari pengelola jurnal	8 September 2023
3	Wajib ada Bukti Revisi dalam bentuk tabel	8 November 2024
4	Email informasi melacak kemajuan naskah dalam proses editorial	2 November 2023
5	Catatan Penelaahan Awal dan Permohonan Perbaikan Artikel	8 November 2023
6	Pengiriman revisi naskah sesuai catatan penelaahan	26 Desember 2023
7	Pemberitahuan Penerbitan	29 Desember 2023
8	Informasi hasil proofread dari pengelola jurnal	31 Mei 2024
9	Permohonan Penyesuaian Konten Artikel	31 Mei 2024
10	Pengiriman Revisi artikel, bukti transfer dan form transfer copyright	29 Desember 2024
11	Penerbitan Artikel	6 Juni 2024

Untuk poin-poin berikut bisa disesuaikan dengan bukti yang dipunya oleh dosen kecuali warna merah wajib untuk dibuatkan :

1. Submit Artikel

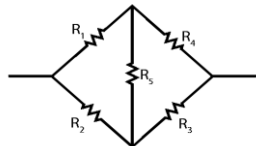
The screenshot displays a web interface for a journal submission system. At the top, there are four tabs: 'Submission' (active), 'Review', 'Copyediting', and 'Production'. Below the tabs is a 'Submission Files' section with a search icon and the text 'Q Search'. A file entry is shown with a document icon, the ID '16364-1', the filename 'phisca, JAETS Paper DRTPM Phisca.docx', the date 'September 8, 2023', and the file type 'Article Text'. At the bottom right of the file list, there is a 'Download All Files' button.

2. Email mendapatkan respon dari pengelola jurnal



3. Wajib ada Bukti Revisi dalam bentuk tabel


No	Text Asal	Komentar Reviewer	Text Revisi
1	<i>Intravenous was used to replace fluids and balanced electrolytes body. Intravenous replacement should not be delayed because it can be fatal for the patient. Technological developments increased human creativity and created various devices to help humans become more effective. The medical world needed technology, too. Based on this background, the authors designed an intravenous fluid monitoring system to make it easier for nurses. This research consisted of three main parts: the system input, the microcontroller as the system processor, and the system output as expected. This intravenous fluid monitoring uses a Load Cell to measure the volume of intravenous fluid, an RTC module to estimate the time it ran out of intravenous, an LCD as intravenous status information, and a buzzer as an information alarm if the intravenous fluid is detected to be running out. The microcontroller in this research was Arduino Uno. The results showed the intravenous fluid had the same pressure as human body fluids (isotonic). The Load Cell had an accuracy value of 99.9%, and the number of intravenous drops per minute under normal conditions was 20, with an estimated time-out of 8 hours.</i>	Please rewrite your abstract, now you use a very narrative style to describe the procedures of doing your research instead of providing a whole picture of your work. You should use a few sentences to describe: the purpose of your study, why you did this research? the method you used in this study, what method did you use to solve your research problem? The results of your study, what have you got from this study? the implication of your study, what are the practical and theoretical implications of your study? I mean how can the results be applied to theory and practices. the values of your study, what's your contribution to theory or/practice	<i>Intravenous fluids are used to replace the body's fluid and electrolyte balance. This is a crucial need for a patient during treatment, so infusion replacement should not be delayed as it can be fatal to the patient. Medical personnel must always pay attention to the patient's infusion. This has always been a problem because the limited number of medical personnel and the large number of patients often make it difficult for medical personnel to carry out their duties. The development of technology increases human creativity and creates various tools to help humans be more effective, including in dealing with problems in the medical world. Based on this background, the author designed an infusion fluid monitoring system to facilitate nurses in hospitals that lack electrical support and internet networks. This research aims to make an intravenous fluid monitoring tool using a microcontroller effectively and realtime. The research method we use is research and development, while the data analysis method uses comparative quantitative analysis. This research consists of three main parts, namely system input, microcontroller as system processor, and system output as expected. This infusion fluid monitoring uses Load Cell to measure the volume of infusion fluid, RTC module to estimate the time of infusion fluid expiration, LCD as infusion fluid status information, and buzzer as an information alarm if the infusion fluid is detected to run out. The microcontroller used in this research is Arduino Uno. The results showed that infusion fluid has the same pressure as human body fluids (isotonic). Load Cell has a mass reading accuracy value of 99.88%, the accuracy of testing the conversion of intravenous fluid measurements into milliliters of 99.49%, and the number of infusion fluid droplets per minute under normal conditions is 20, with an estimated time out for 8 hours.</i>
2	This is driven by the condition of healthcare facilities such as hospitals, health centers, and polyclinics. The large number of patients but the limited number of medical personnel is a problem in providing the best service, one of	Provide a brief overview of the current challenges in healthcare facilities, specifically those related to the administration and monitoring of intravenous fluids. Mention the	Based on data from the Yogyakarta City Health Office in 2021, there were 87 nurses in 18 health centers in Yogyakarta City. The average number of nurses in one health center is 3 to 4 people even though based on the Regulation of the Minister of Health R.I. Number 75 of 2014 the standard is 5 nurses.

	which is handling patients intravenous	increasing patient loads and the difficulties faced by medical personnel.	
3	This system research produces a real-time tool that can monitor the patient's intravenous fluids through computers and smartphones. There are differences in the components that the author will use in conducting further research; namely, the author will use a weight sensor to determine the volume of intravenous fluid, while this study uses a potentiometer to measure the volume of intravenous. The author chose a weight sensor to minimize errors in measuring the volume of intravenous fluids.	Continue with your existing content about previous studies in the field. Highlight the key findings and innovations of these studies, especially those aspects that are relevant to your research.	This research includes experimental with loadcell testing using mass variations, testing changes in load cell sensor voltage using a digital multimeter, drops per minute comparing the value of drops in the system and natural conditions in one minute, testing the accuracy of the RTC module in calculating time. In addition, the conversion of infusion fluid measurements from mass to volume using a load cell was also tested. The conversion from mass to volume is done by using the formula for the density of intravenous fluid, which is 0.9%. In collecting data in this study, it has not been used on actual patient research objects, because it is still in the prototype stage. Testing is intended to test the accuracy and effectiveness of the system with the various tests above. In the data analysis process, the author uses quantitative methods with comparisons, comparing the data generated by the system with measuring instruments that have been tested and calibrated properly.
4	This intravenous fluid monitoring uses a Load Cell to measure the volume of intravenous fluid, an RTC module to estimate the time it ran out of intravenous, an LCD as intravenous status information, and a buzzer as an information alarm if the intravenous fluid is detected to be running out.	Clearly state the main objective of your research. For example, you could say that your research aims to design a novel intravenous monitoring system using specific components (mention the weight sensor, Arduino Uno, etc.) to address the existing challenges in healthcare facilities.	This infusion fluid monitoring uses Load Cell to measure the volume of infusion fluid, RTC module to estimate the time of infusion fluid expiration, LCD as infusion fluid status information, and buzzer as an information alarm if the infusion fluid is detected to run out. The microcontroller used in this research is Arduino Uno.
5	Load Cell is an electronic component that is used to measure pressure. The working principle of this sensor is when the object is exposed to pressure, the foil or wire will be deformed so that the threads will be stretched lengthwise. When this happens, the threads become longer and thinner, increasing their electrical resistance.	Describe in more detail how the Load Cell sensor measures the volume of intravenous fluid. Explain any calibration processes and the technical specifications of the equipment used.	<p>Load Cell is an electronic component that is used to measure pressure. The working principle of this sensor is when the object is exposed to pressure, the foil or wire will be deformed so that the threads will be stretched. When this happens, the threads become longer and thinner, increasing their electrical resistance. The Load Cell sensor in this study measures the volume of intravenous fluid. The Load Cell sensor used has a weight capacity of 1 kg and has a working principle based on the Wheatstone bridge. The Wheatstone bridge is the basis for several electronic circuits, including some used in instrumentation and measurement.</p>  <p>Fig. 1. Wheatstone Bridge Circuit</p> <p>The formula used in the Load Cell working principle to get the V_{out} value, which is as follows [19],</p> $V_o = (V_s \times (\frac{R_1}{R_1+R_4})) - (V_s \times (\frac{R_2}{R_2+R_3}))$
6	This Load Cell sensor test aims to see the accuracy of the Load Cell sensor, which is used as a sensor	Explain the significance of the relationship between Load Cell	This Load Cell sensor test aims to see the accuracy of the Load Cell sensor, which is used as a sensor that will be used to measure the weight of the

	<p>that will be used to measure the weight of the intravenous. This test includes the measurement of several objects that have the smallest to the most enormous mass in grams, which later the test results will be compared with the reference weight. Where the reference weight comes from a conventional scale, the object to be weighed using a load cell was previously weighed with a conventional scale.</p>	<p>voltage and weight. Discuss how this relationship affects the accuracy of weight measurement in your system and its implications for real-time monitoring.</p>	<p>intravenous. This test includes the measurement of several objects that have the smallest to the most enormous mass in grams, which later the test results will be compared with the reference weight. Where the reference weight comes from a conventional scale, the object to be weighed using a load cell was previously weighed with a conventional scale.</p> <p>The minimum load cell measurement is 1 gram because if you take measurements below 1 gram, the load cell cannot display the measurement results, or what is read on the LCD or serial monitor is 0. Meanwhile, the maximum load cell measurement reaches 3 kg, but the results are not accurate again because the Load Cell used is a 1kg Load Cell; that Load Cell is only accurate at 0-1kg workloads. This follows what is described in the Load Cell data sheet, where the Load Cell is capable of being accurate when working at maximum load per the Load Cell specifications used.</p>
7	<p>Then, this system uses the RTC module to estimate when the intravenous fluid runs out. It also uses a buzzer as a warning alarm when the intravenous fluid is detected running out in the nurse's room.</p>	<p>Discuss the practical implications of the RTC module accuracy test. How does the RTC module's performance impact the system's ability to estimate the time for intravenous fluid to run out? How does it affect the warning alarms for nurses?</p>	<p>Then, this system uses the Real Time Clock (RTC) module to estimate when the intravenous fluid runs out. It also uses a buzzer as a warning alarm when the intravenous fluid is detected running out in the nurse's room.</p> <p>The RTC module, which has previously counted the time when the voltage is applied and has displayed the current time display (WIB) on the LCD, will send data about when the intravenous fluid will run out. Arduino Uno will display it on the LCD. The Load Cell sensor will continuously weigh the volume of the intravenous fluid and send its data to the Arduino Uno until reaches the threshold volume previously programmed in the Arduino IDE. It will activate the buzzer as a warning alarm for nurses.</p>

4. Email informasi melacak kemajuan naskah dalam proses editorial

Informasi Progress Submit Artikel **JAETS**

 **Phisca Aditya Rosyady** (phisca.aditya@te.usd.ac.id)
 kepada: editor@jaets, muhammad.luthfi

Kam, 2 Nov 2023, 11:01

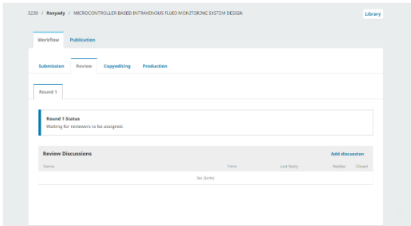
Assalamulaykum, selamat siang mohon maaf apakah bisa dilinfokan progress terkait paper saya yang saya submitkan tanggal 8 September 2023 kemarin (2 bulan lalu) dengan judul MICROCONTROLLER-BASED INTRAVENOUS FLUID MONITORING SYSTEM DESIGN.

Karena pada saat saya cek di OJS, proses sudah review namun nampaknya sudah lewat batas waktunya (seperti gambar terlampir)

Mohon informasi progressnya nggih, mohopn maaf merepotkan. terimakasih,

Regards,

Phisca Aditya R.



5. Catatan Penelaahan Awal dan Permohonan Perbaikan Artikel

Notifications



[JAETS] Editor Decision

2023-11-08 08:17 AM

Phisca Aditya Rosyady:

We have reached a decision regarding your submission to Journal of Applied Engineering and Technological Science (JAETS), "MICROCONTROLLER-BASED INTRAVENOUS FLUID MONITORING SYSTEM DESIGN".

Our decision is: Revisions Required

Reviewer A:

Introduction : Provide a brief overview of the current challenges in healthcare facilities, specifically those related to the administration and monitoring of intravenous fluids. Mention the increasing patient loads and the difficulties faced by medical personnel.

Overview of Existing Studies: Continue with your existing content about previous studies in the field. Highlight the key findings and innovations of these studies, especially those aspects that are relevant to your research.

Research Gap: Identify the gap in existing research that your study aims to fill. Explain why there is a need for your research despite the previous work in this area. This could include the specific focus on the type of sensor or the need for alternative notification methods.

Clearly state the main objective of your research. For example, you could say that your research aims to design a novel intravenous monitoring system using specific components (mention the weight sensor, Arduino Uno, etc.) to address the existing challenges in healthcare facilities.

Add Literature Review Section

Literature Review: It's essential to include a section on the literature review that provides an overview of the existing research related to intravenous fluid monitoring, Load Cell sensors, and similar projects. This will help justify the need for your research, highlight the gaps in the existing literature, and show how your work contributes to the field

Research Methods :

Clearly state the specific objectives of your research. What are you aiming to achieve with this intravenous fluid monitoring system? What problems or challenges are you addressing? What are your research goals?

Research Design: Explain the design of your research, including whether it's experimental, observational, or a combination of both. Detail how data will be collected and analyzed.

Participants or Subjects: If your research involves human participants, provide information about the recruitment process, informed consent, and any ethical considerations. Describe the criteria for selecting the medical personnel and settings for testing your system.

Data Collection: Describe in more detail how the Load Cell sensor measures the volume of intravenous fluid. Explain any calibration processes and the technical specifications of the equipment used.

Data Analysis: Outline the data analysis methods you plan to use. How will you interpret the data collected from the Load Cell sensor and other components of the system? Will you use statistical analysis, qualitative coding, or other methods?

Ethical Considerations: Discuss any ethical issues related to your research, especially if it involves human subjects or medical equipment. Explain how you will address these concerns, ensuring the safety and privacy of participants.

Result and Discussion :

Add Discussion Section

Provide a more in-depth interpretation of the results. Discuss the implications of the accuracy of the Load Cell sensor for your intravenous fluid monitoring system. Explain how the Load Cell's performance may impact the precision of your system in measuring intravenous fluid volume.

Explain the significance of the relationship between Load Cell voltage and weight. Discuss how this relationship affects the accuracy of weight measurement in your system and its implications for real-time monitoring.

Compare your results with industry or manufacturer standards for Load Cell sensors. Are your findings consistent with what is expected from a 1 kg Load Cell? Address any discrepancies and their potential impact on your system's accuracy.

Discuss the practical implications of the RTC module accuracy test. How does the RTC module's performance impact the system's ability to estimate the time for intravenous fluid to run out? How does it affect the warning alarms for nurses?

Discuss the practical implications of your findings for medical personnel and patient care. How does the accuracy and performance of your system contribute to the field of biomedical instrumentation?

References should come from 90% of research articles published in indexed journals. Add at least 35-40 reputable journals published in the last 8 years, and use Mendeley. Use a maximum of 3 book sources. Adjust the reference writing system by referring to the guidelines for author. Include the DOI/url from the article. Avoid sources that come from the final project (thesis/dissertation), laws, or decrees from government bureaucracies. Use journal articles, books (if you have to).

Recommendation: Revisions Required

.....

Reviewer B:

Abstract

please rewrite your abstract, now you use a very narrative style to describe the procedures of doing your research instead of providing a whole picture of your work. You should use a few sentences to describe: the purpose of your study, why you did this research? the method you used in this study, what method did you use to solve your research problem? The results of your study, what have you got from this study? the implication of your study, what are the practical and theoretical implications of your study? I mean how can the results be applied to theory and practices. the values of your study, what's your contribution to theory or/practice

Introduction

In the introduction section, (The Introduction seems to be a little bit too short)

1. Introduction section : explain the context of the study and state the precise objective An Introduction should contain the following three parts: - Background: Authors have to make clear what the context is. Ideally, authors should give an idea of the state-of-the art of the field the report is about. - The Problem: If there was no problem, there would be no reason for writing a manuscript, and definitely no reason for reading it. So, please tell readers why they should proceed reading. Experience shows that for this part a few lines are often sufficient. - The Proposed Solution: Now and only now! - authors may outline the contribution of the manuscript. Here authors have to make sure readers point out what are the novel aspects of authors work. Authors should place the paper in proper context by citing relevant papers. At least, 8 references (recently journal articles) are cited to support this section
2. you should summarize the gaps of existing literature, then present you aim to do.
3. Please use international journal as references not local references.

Literature review.

Coverage of other relevant work is partly provided, however there is a lack of comment and critical review of this work - it is just a 'matter-of-fact' listing of relevant literature. Including a wider critical overview of the most recent literature would significantly contribute to the quality of the manuscript and would strengthen its academic perspective and scientific foundation. Much more critical analysis needs to be undertaken of the relevant literature and key points/issues identified which will underpin the rest of the manuscript. Try to include some latest journal article references published from 2019-2023 in the specific areas to improve the relevance and currency of the research. Extended literature review would help you also with addressing the issue of contribution of the manuscript. The literature review section should also present the theoretical framework underpinning the study. The literature review needs to improve its scope by including recent studies and identifying and drawing upon the critical body of knowledge relevant to the research, including learning theories. Overall, the literature review should relate to the research questions and points of emphasis. Furthermore, the paper needs to explain how this literature was selected to be reviewed, i.e., what selection method was followed and how it was ensured that the review was sufficiently comprehensive and reflected the current state of the art.

Methodology

Add an explanation of what information can be obtained from the displayed image
 In the methodology, avoid writing conceptually, write down why the method was chosen, you must write down the reasons, who are the participants, their characteristics, the data to be collected, the instruments used.

Result and Discussion

The discussion discusses the findings or novelty of research findings in articles and juxtaposes/compare the findings with the results of previous research in relevant journal articles. Minimum of 15 relevant research sources from international journal articles

in the result and discussion avoid using Numbering and Bulleting. Please make it into a paragraph by adding a connecting sentence

Add Discussion Part.
 This discussion must be included a comparison of the results of this study with previous studies. Please add, and give generalizations at the end of the discussion.

Conclusion : Your conclusion should make your readers glad they read your paper. Summarize sentences the primary outcomes of the study in a paragraph (NOT in numbering).
 Add implication of your research

References : Use **APA STYLE**, Minimum 40 references primarily with a minimum of 80% to journal papers SCOPUS, Wos, etc. mandatory use of reference applications such as mendeley or similar applications. References must be cited in paragraphs. should not only be included without citation in the paragraph.
 add doi/link every references
 Change all figure with good/high resolution

Recommendation: Revisions Required

[Journal of Applied Engineering and Technological Science \(JAETS\)](#)

6. Pengiriman revisi naskah sesuai catatan penelaahan

Revisions		Q Search	Upload File
▶  21065-1	Article Text, 3230-Article Text-16364-1-2-20230908 (Revisi 26 Desember 2023).docx	December 26, 2023	Article Text

7. Pemberitahuan Penerbitan

Notifications ✕

[JAETS] Editor Decision

2023-12-29 10:03 PM

Phisca Aditya Rosyady:

We have reached a decision regarding your submission to Journal of Applied Engineering and Technological Science (JAETS), "MICROCONTROLLER-BASED INTRAVENOUS FLUID MONITORING SYSTEM DESIGN".

Our decision is to: Accept Submission

[Journal of Applied Engineering and Technological Science \(JAETS\)](#)

8. Informasi hasil proofread dari pengelola jurnal

Notifications ✕

[JAETS] Editor Decision

2024-05-31 06:50 PM

Phisca Aditya Rosyady:

The editing of your submission, "MICROCONTROLLER-BASED INTRAVENOUS FLUID MONITORING SYSTEM DESIGN," is complete. We are now sending it to production.


Submission URL: <https://journal.yrpiiku.com/index.php/jaets/authorDashboard/submission/3230>

[Journal of Applied Engineering and Technological Science \(JAETS\)](#)

9. Permohonan Penyesuaian Konten Artikel

Copyedited		Q Search	
 27662-1	luthfi2019, 649-660.docx	May 31, 2024	Article Text

10. Pengiriman Revisi artikel, bukti transfer dan form transfer copyright

Revisions		Q Search		Upload File
 21065-1	Article Text, 3230-Article Text-16364-1-2-20230908 (Revisi 26 Desember 2023).docx	December 26, 2023	Article Text	

Copyediting Discussions			Add discussion	
Name	From	Last Reply	Replies	Closed
Publication Fee	luthfi2019 2023-12-29 10:05 PM	-	0	<input type="checkbox"/>
LOA, INVOICE & RECEIPT	luthfi2019 2023-12-29 10:27 PM	-	0	<input type="checkbox"/>

Publication Fee
✕

Participants

Muhammad Luthfi Hamzah (luthfi2019)

Phisca Aditya Rosyady (phisca)

Messages

Note	From
<p>Dear Authors</p> <p>Publication Fee :</p> <p>In order to cover part of the publication cost, each accepted paper is charged : Bank Transfer IDR 7.000.000</p> <p>BIC/SWIFT : CENAIJAXXX BANK NAME : BANK CENTRAL ASIA ADDRESS : KCP JUANDA, PEKANBARU, INDONESIA NAME ACC : MUHAMMAD LUTHFI HAMZAH ACCOUNT NO : 1440563771</p> <p>your paper will be publish at Volume 5 issue (2) June 2024</p> <p>(please attach proof of payment and your final paper to this message)</p> <p>please change all figures with good quality size</p> <p>Best Regard Chief Editor JAETS</p>	<p>luthfi2019 2023-12-29 10:05 PM</p>

Add Message

**Participants**

Muhammad Luthfi Hamzah (luthfi2019)

Phisca Aditya Rosyady (phisca)

Messages

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Best Regards Chief Editor	
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luthfi2019, 3230-Receipt.pdf	

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Email : yayasan.yrpi@gmail.com_

RECEIPT

No. 3230/XII/JAETS/2023

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Paper ID : 3230
Author : Phisca Aditya Rosyady et al...
Article Title : Microcontroller-Based Intravenous Fluid Monitoring System Design
Affiliation : Universitas Ahmad Dahlan, Indonesia
Price : IDR 7.000.000,- or \$460
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If further information required, please do not hesitate to contact our journal editor.
Thank you for your consideration.

PAID

Pekanbaru, 29 December 2023



Dr. M. Luthfi Hamzah. B.IT., M.Kom
Editor in Chief

Penerbitan Artikel



YAYASAN RISET & PENGEMBANGAN INTELEKTUAL

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JL. Amanah No. 17 B, Tangkerang Tengah, Pekanbaru – Riau
Email : yayaan.yrpi@gmail.com

LETTER OF ACCEPTANCE (LOA) No. 3230/XII/JAETS/2023

Dear Author/s,

Based on the results of the reviewer's evaluation of the submitted manuscript, we have decided that your manuscript has been received and will be published on Journal of Applied Engineering and Technological Science (JAETS) volume 5 issue 2 June 2024. The details of the article are as follows :

Author : Phisca Aditya Rosyady, Nurina Umy Habibah, Ahmad Raditya Cahya Baswara, Nuni Ihsana, Dedik Sulistiawan & Widya Rahayu Dinata
Article Title : Microcontroller-Based Intravenous Fluid Monitoring System Design
Affiliation : Universitas Ahmad Dahlan, Indonesia

If further information required, please do not hesitate to contact our journal editor.
Thank you for your consideration.

Pekanbaru, 29 December 2023



Dr. M. Luthfi Hamzah, B.IT., M.Kom
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Microcontroller-Based Intravenous Fluid Monitoring System Design

Phisca Aditya Rosyady

Universitas Ahmad Dahlan

Nurina Umy Habibah

Universitas Gadjah Mada

Ahmad Raditya Cahya Baswara

Universitas Ahmad Dahlan

Nuni Ihsana

Universitas Ahmad Dahlan

Dedik Sulistiawan

Taipei Medical University

Widya Rahayu Dinata

Universitas Ahmad Dahlan

DOI: <https://doi.org/10.37385/jaets.v5i2.3230>

Keywords: Load Cell, RTC, Intravenous Monitoring, Buzzer

Abstract

Intravenous fluids are used to replace the body's fluid and electrolyte balance. This is a crucial need for a patient during treatment, so infusion replacement should not be delayed as it can be fatal to the patient. Medical personnel must always pay attention to the patient's infusion. This has always been a problem because the limited number of medical personnel and the large number of patients often make it difficult for medical personnel to carry out their duties. The development of technology increases human creativity and creates various tools to help humans be more effective, including in dealing with problems in the medical world.

[PDF](#)

Published
2024-06-06

How to Cite

Rosyady, P. A., Habibah, N. U., Baswara, A. R. C., Ihsana, N., Sulistiawan, D., & Dinata, W. R. (2024). Microcontroller-Based Intravenous Fluid Monitoring System Design. *Journal of Applied Engineering and Technological Science (JAETS)*, 5(2), 649–660. <https://doi.org/10.37385/jaets.v5i2.3230>

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Issue

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Section

Articles

Journal of Applied Engineering and...

Q4 Computer Science (miscellaneous)
best quartile

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0.14
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1.4 2022
CiteScore

37th percentile
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