



**SDI Review Form 1.6**

Journal Name:	<a href="#">Physical Science International Journal</a>
Manuscript Number:	Ms_PSIJ_31535
Title of the Manuscript:	DESIGN ANALYSIS AND IMPLEMENTATION OF A 0.5 KVA UNINTERRUPTIBLE POWER STABILIZER
Type of the Article	Method Article

**General guideline for Peer Review process:**

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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**PART 1: Review Comments**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<b><u>Compulsory</u></b> REVISION comments		
<b><u>Minor</u></b> REVISION comments	<ol style="list-style-type: none"> <li>1. Can we introduce any other type of DC-DC converter like SEPIC instead of the designed one?</li> <li>2. What are the main advantages of using this type of converter and what about the efficiency?</li> <li>3. What are the limitations of proposed 0.5KVA UPS?</li> <li>4. What is the existing technologies and what is new in this technology?</li> <li>5. What is the expected life of UPS?</li> <li>6. What is the switching frequency of MOSFET used?</li> <li>7. What is the purpose of alarm circuit provided?</li> <li>8. What are the purpose of automatic control unit?</li> <li>9. What about the power losses in UPS?</li> <li>10. What is the estimated cost of UPS?</li> <li>11. What are the discharge durations of the UPS battery with load?</li> <li>12. Explain briefly about the control circuits?</li> </ol>	<ol style="list-style-type: none"> <li>1. Yes a SEPIC can also be introduced or replaced with the used Linear DC-DC converter/regulator.</li> <li>2. It is easy to construct and also purchase. Making it easily replaceable if damaged. It has an efficiency of 45% which is typical for linear regulators. (effected in section II of MODE II operation on the manuscript)</li> <li>3. The limitations have been included as number 12 heading in the manuscript.</li> <li>4. This has been included into INTRODUCTION section of the manuscript. The UPSz focuses mainly on stabilizing fluctuating voltages.</li> <li>5. That was not included in the scope.</li> <li>6. The switching frequency is 50kHz and has been stated in (4.2) of the manuscript</li> <li>7. The purpose has been stated properly inside the manuscript in section 6B (alarm unit)</li> </ol>



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		<p>8. The purpose has been stated properly inside the manuscript in section 5B (automatic control switch)</p> <p>9. This has been calculated in the section 6A (double winding transformer) of the manuscript.</p> <p>10. The estimated cost has been introduced into the manuscript as number 14 (costing)</p> <p>11. The discharge durations are displayed in table 2 under number 10( discussion of the graphs)</p> <p>12. A brief explanation of the control circuits have been made in number 5 (control units) in the manuscript.</p>
<b><u>Optional/General</u></b> comments		