

## ***Interactive comment on “A low-cost monitor for measurement of fine particulate matter and aerosol optical depth. Part 1: Specifications and testing” by Eric A. Wendt et al.***

### **Anonymous Referee #2**

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A low-cost monitor for measurement of fine particulate matter and aerosol optical depth. Part 1: Specifications and testing

General Comment: This paper presents the development and validation of low cost sensor to measure PM mass and aerosol optical depth. The paper is interesting and within the scope of AMT. Overall paper is well written but I would recommend some minor changes in manuscript, which are listed below.

1. Introduction section is well written but I feel Line 3-11 at page 3 is bit confusing and need to rewrite for good understanding. 2. Please define what is UPAS (Line 30, page 3)? 3. Both Equation 5 and 6 are very important for this paper approach but there is

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lack of understanding in these two equations as well as overall section. I have very similar concern as Reviewer 1, which need to be addressed. 4. Line 2, Page 7: Is mass flow could be changed in your setting? If yes, what would be changes in results? 5. Line 12-13, Page 7: Here need to give some detail of measurements of AMOD taken by citizen scientists. 6. Section 2.5: Please provide proper description of references instruments 7. What is the explanation of performance of AMOD in different atmospheric conditions i.e. rainy, clear sky, high humidity and very low temperature conditions. Assumptions and restrictions of these conditions should be added in the manuscript. 8. I request to add a conclusions section along with scope recommendations

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