

**Testing and Commissioning of Malaysian Grid Connected PV System
Calculator using Visual Basic 2008**

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ABSTRACT

This thesis presents a Testing and Commissioning of Malaysian Grid Connected PV System Calculator using Visual Basic 2008. This thesis report initially will discuss the basic operation of a photovoltaic system and testing and commissioning for photovoltaic system. Besides that, this thesis also will discuss about the data that include in testing and commissioning process. Visual basic software is used in create virtual form and to create calculator which the final . exe file can be run at any computer and notebook.

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

The human population of the earth has now passed 6 billion [1], and all of these inhabitants want the energy necessary to sustain their lives. Exactly how much energy is required to meet these needs and exactly what sources of energy will meet these needs will be questions to be addressed by present and by future generations. However, is that developing nation will be increasing their per capital energy used significantly. For example, in 1997, the people Republic of China was building electrical generating plants at rate of 300 megawatts per week. These plants have been using relatively inexpensive, old, inefficient, cold-fired technology and provide electricity to predominantly inefficient end uses [2]. The potential consequences to the planet continuation of this effort are profound. Photovoltaic power system is one of the renewable energy that has been found to prevent the power system problem.

Recently, for the past few years, the interest in renewable energy for power generation has been increasing because of environmental issues and depletion of fossil fuels. The huge technological improvements for photovoltaic cells (PV) along with their decreasing cost seem to justify their use as a possible solution [3]. Photovoltaic systems are the solar energy supply systems, which either supply power directly to electrical equipment or feed energy into the public electricity grid [4].