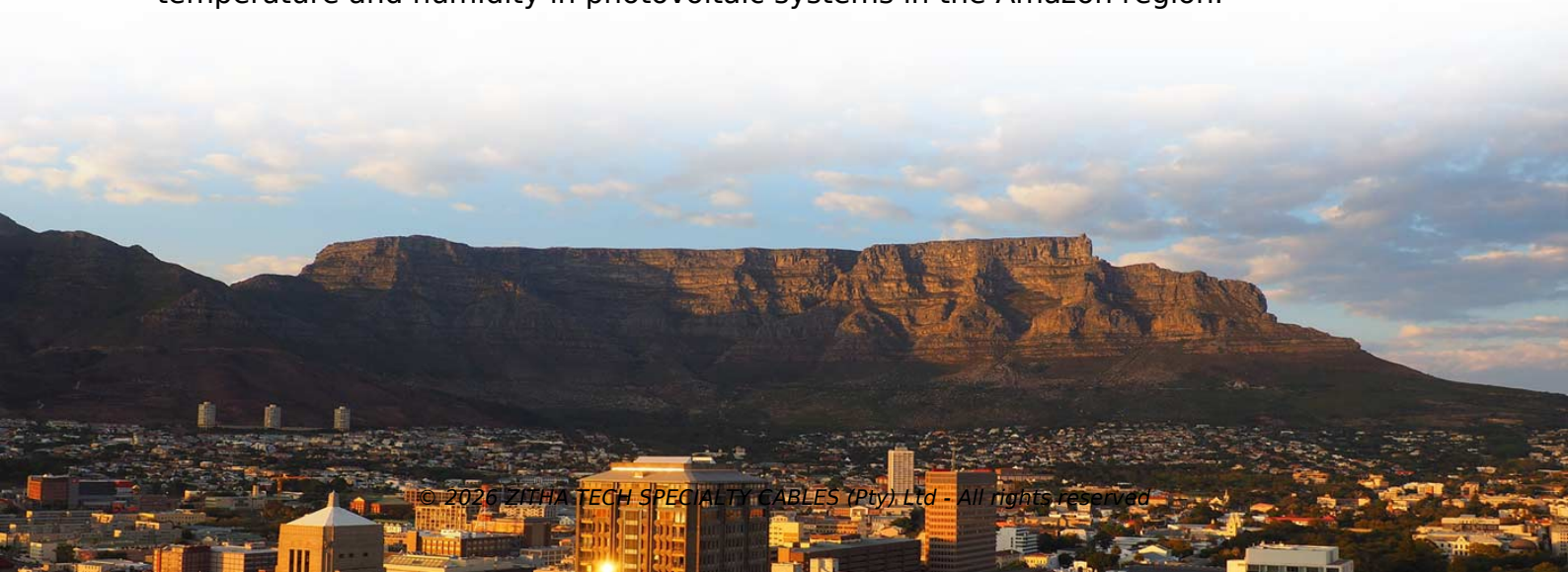
**ZITHA TECH SPECIALTY CABLES (Pty) Ltd**

# Design of IoT Module for Photovoltaic Power Plants



## Overview

This study presents the design and fabrication of a smart photovoltaic (PV) module integrated with an Internet of Things (IoT) platform and an adaptive Maximum Power Point Tracking (MPPT) algorithm for real-time optimization of energy output under varying. This study presents the design and fabrication of a smart photovoltaic (PV) module integrated with an Internet of Things (IoT) platform and an adaptive Maximum Power Point Tracking (MPPT) algorithm for real-time optimization of energy output under varying. Photovoltaic systems are among the renewable energy sources with the greatest global impact, driven by technologies that enable real-time monitoring, predictive maintenance, and intelligent integration with the electricity grid. The system. Solar power plants (SPP) are one of the most potential renewable energy sources that can be used as a sustainable solution to meet energy needs. However, the efficiency and reliability of SPP systems remain major challenges that need to be addressed. These values are realistic and accurate, based on the sensors used to measure the. In this context, this paper presents the design and implementation of an embedded Internet of Things (IoT) system to monitor temperature and humidity in photovoltaic systems in the Amazon region.



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## Article Content

Design and Fabrication of an IoT-Integrated Smart Solar PV Module

This study presents the design and fabrication of a smart photovoltaic (PV) module integrated with an Internet of Things (IoT) platform and an adaptive Maximum Power Point Tracking (MPPT) algorithm

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