

# LIFE-BATT

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#### **CHAPTER 1**

## **1.0 EXECUTIVE SUMMARY**

The team is developing a device called Life-Batt which enables two phones to share the battery without using a wire or external battery such as power bank. Life-Batt is designed to be compatible with all types of phones. The idea is generated based on the observation of our daily life that shows many people face problem when their phones runs out of battery. Besides, phones battery can last less last than 24 hours. Most people claim that even though they have a portable charger, they sometimes forget to charge the portable charger. Different phones have different charger cable and this causing a problem to most people as they have to bring their own charger cable everywhere they go. As people nowadays prefer a convenient device to make their life easier. Life-Batt is suitable as it is small, wireless, and it is compatible with all types of phones. Target market are students and workers age between 18 to 45 years old. These groups are having users of smart phone.

#### **CHAPTER 2**

## 2.0 PRODUCT DESCRIPTION

# 2.1 Description of Product

#### 2.1.1 Introduction

The product is Life-Batt a device which enables two phones to share the battery without using a wire or external battery such as power bank. Life-Batt is designed to be compatible with all types of phones.

## 2.1.2 Purpose

The purpose of the product development are:

- > To enables two phones to share the battery wirelessly.
- > To ease the user to easily charge phone instead of bringing powerbank everywhere.

# 2.1.3 Product concept

- > For smartphone users to charge the phone's power anywhere.
- > To minimize the difficulties for users in looking for cables and plugs whenever the phone's power is drained.
- ➤ Life-Batt consists of a transmitting coil and a receiving coil that will help to transmit the energy from one phone to another phone. These coils produce an electromagnetic field which send energy from a charging base station which transmit power to receiver coil. This device acts as a wireless power transfer.

## 2.2 Product application

- > The product can help smartphone users to charge phone's battery by sharing power with other phones that connect to the Life-Batt.
- > The battery percentage will increase immediately. (fast charging)
- > This device will have two buttons. One is the transmitter button and the other is a receiver button. These buttons act as a switch to turn on and off the device.
- Wireless and easy to use.
- Compatible with all types of phones.

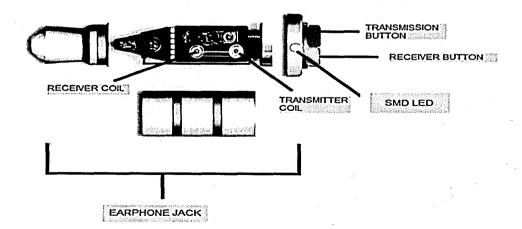
## 2.2.1 Function

- Receiver Button to activate the receiver coil inside the the Life-Batt when the button is pushed.
- Transmitter Button to activate the transmitter coil inside the Life-Batt when the button is pushed.
- LED to show the device is ready to transmit or receive power. A green light displayed indicate that the device is ready to transfer power to other smartphone.
- Transmitter coil to transmit power to other smartphones.
- Receiver coil to receive power from other smartphones.
- Wireless can transmit and receive power within about 5 meter.

# 2.3 Unique features

- These are the unique features of this device.
  - > Receiver and transmitter button to activate the coils.
  - > Receiver and transmitter coil to receive and transmit the energy power.
  - > Small size (3cm) easy to bring anywhere.

## 2.3.1 Picture Description



Front and Back view of physical product.