2.13-Inch Passive NFC-Powered E-Paper/E-Ink Display - No Battery Needed

SKU 104990662

This 2.13-Inch E-Paper screen supports NFC to transmit images. It doesn't need to be powered by a cable or a battery. Once you transmit the images by NFC on this screen, the image will remain for weeks.

Overview

There is a screen, powered without battery or cable. How does it display the images? You may think it is impossible. But with the help of NFC and E-Paper technology, this kind of screen has made it happen.

If you have a smartphone that has the NFC function, you can use your phone to control this screen and transmit images to it. Then the screen will remain the image for weeks without power until you transmit another image.

Features

- Latest Passive NFC Technology
- A Battery is not required for power
- Retain the images on the screen for weeks
- Easy to set up using the provided APP
- Light ABS case for protection

Description

What is an E-Paper?

E-Paper, sometimes called E-Ink is a technology that replicates the look of ordinary ink on paper. Normally, traditional displays use backlighting to illuminate pixels and display an image whereas in E-Paper displays, there is an electrically charged surface and the movement of electrically charged molecules in an electric field helps to display an image on the screen. When the user looks at the E-Paper screen, the light from the environment gets reflected from the surface of the E-Paper and reaches the eyes.

Advantages Over Traditional Displays

E-Paper screens are bi-stable, which means unlike traditional displays that refresh at about 60 times per second and require a power source to retain the content, an E-Paper will retain a static image for weeks without electricity and needs power only when the content on the screen needs to be changed. Also, they offer paper-like readability where they can heavily reduce the strain on the eyes while being able to use outdoors under bright sunlight. E-Papers have wide viewing angles and have high-resolution displays with no-glare.

Power E-Paper Using NFC?

As mentioned before, E-Papers only need power when the content needs to be updated on the screen. What if you can use your phone to power the E-Paper display in order to update the content? If your phone has NFC (Near-Field Communication), which is a short-range wireless data transfer technology, you can power the E-Paper display using your phone, since NFC signals carry power with them.

This 2.13-Inch E-Paper adopts Novel Passive NFC Technology and it can help you get out of the trouble of using batteries since it can function without any batteries.

The display on this E-Paper is refreshed using NFC Power and its operation is very stable.
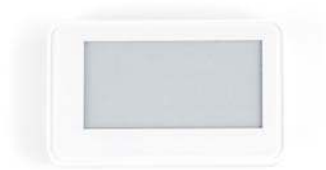

How does it Work?

In order to refresh the content on the display, you need to use a smartphone with an NFC function or an NFC Reader. Just bring the smartphone or reader close to the E-Paper in order for wireless powering and data transfer.

It comes with an Android APP which is easy to setup. You can just use the APP and swipe the phone on the E-Paper like swiping a credit card!

The E-Paper can be refreshed by an ST25R3911B NFC Board as follows

Specifications

Power Supply	Wireless
Display Color	Black/White
Dot Pitch	0.194 x 0.194
Resolution	250 x 122
Viewing Angle	>170°
Grey Scale	2
Refresh Time	2s (data transfer time is not included)

Applications

- Price Tags
- Asset/Equipment Tags
- Shelf Labels
- Conference Name Tags

Dimensions
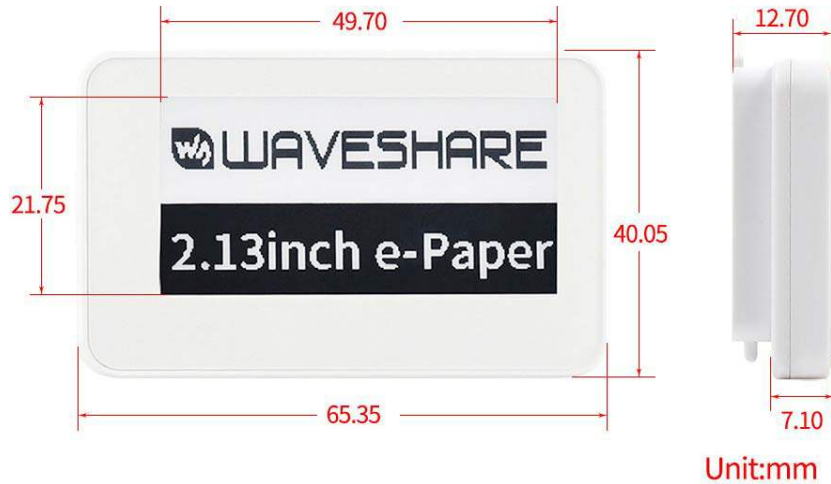
Similar NFC Powered E-Paper/E-Ink Displays

You can refer to the table below to explore various E-Paper Displays with different sizes.

SKU	Product	Display Size
104990663	2.9-Inch Passive NFC-Powered E-Paper without Battery	2.9 inches
104990625	4.2-Inch Passive NFC Powered E-Paper without Battery	4.2 inches
104990643	7.5-Inch Passive NFC-Powered E-Paper without Battery	7.5 inches

Parts List

1 x 2.13-Inch Passive NFC-Powered E-Paper without Battery

ECCN/HTS

HSCODE	8543709990
UPC	