EPD-302. EPD-303. EPD-304

3.7 NFC no battery ePaper Solution Suite

Features

- ARM Cortex M0+ RISC 128kB Flash
- 3.7" ePaper Panel Display
- Passive NFC-Powered e-Paper, No Battery
- Fast Transmission with 3-Colors Interactive LED
- Enable smartphone to refresh by using the Advantech NFC App or NFC Reader
- Supported Operating Temperature Range: B/W & B/W/R/Y: 0 ~ 50 °C & B/W/R: 0 ~ 40 °C
- Prepared NFC DLL sample code and agent with OTA

Introduction

The EPD-302 is for 2-colors, black and white 3.7" NFC ePaper. The EPD-303 is for 3-colors, black, white, and red 3.7" NFC ePaper. The EPD-304 is for 4-colors, black, white, red, and yellow 3.7" NFC ePaper.
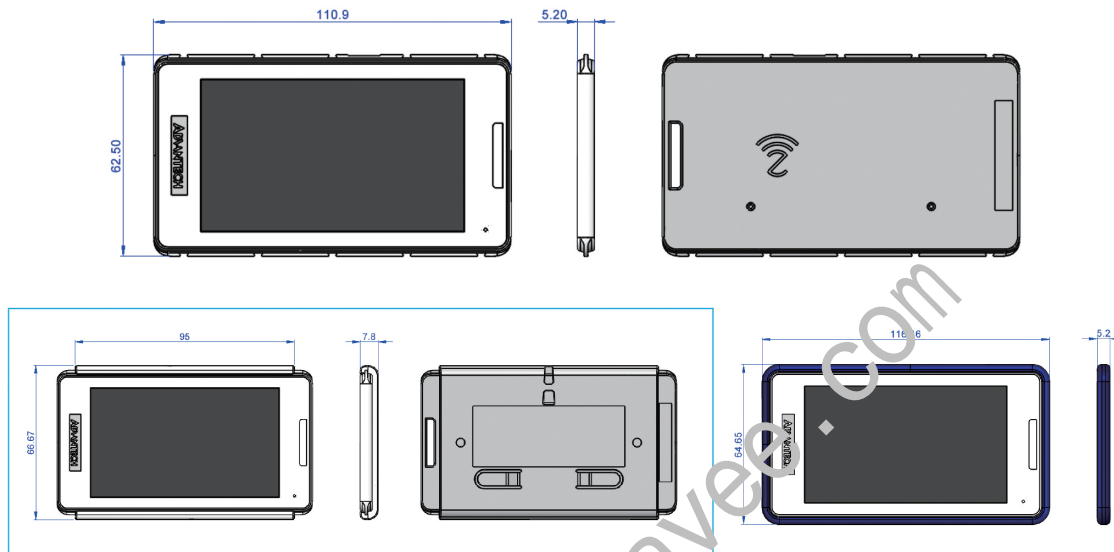
The EPD-302.EPD-303.EPD-304 utilizes NFC ISO/IEC 15693 type for reading and writing user data and images. Widely adopted in factories and logistics, it replaces traditional paper labels for displaying production information. Refreshing the image is made convenient through smartphone or portable NFC reader interaction. Our NFC-powered ePaper technology requires no battery, offers quick refresh rates, and includes readily available sample code for easy integration.

Specifications

Computing System	Processor	ARM Cortex M0+ RISC 128KB Flash
	Memory	RAM 20KB
Display	Screen Size	3.7" (53 x 92.99 x 1.0 mm)
	Resolution	240 x 416 pixels
	Color	EPD-302: Black/White EPD-303: Black/White/Red EPD-304: Black/White/Red/Yellow
Storage	Internal	Flash: 128 KB RAM: 20 KB
	External	NA
	User data / image	253bytes
Protocol	Type	NFC
	ISO/IEC	ISO/IEC 15693 type (ePaper image / User data read and write)
	Frequency	13.56 MHz
Power		NFC power supply
Physical Characteristics	Outline Dimension	62.5 x 110.9 x 5.2 mm
	Weight	34g
	LED	1 LED with 3 colors
	Bracket	Back Holder for EPD-303
Environment	Operating Temperature	Black & White & Red: 0~40 Black & White: 0 ~ 50 °C Black & White & Red & Yellow: 0 ~ 50 °C
	Storage Temperature	-25 ~ 60 °C
	Operating Humidity	80% Relative Humidity, non-condensing
	IP	IP68
Certifications	Safety and EMC	Yes

Dimensions

Unit: mm [inch]

Note: Front lens can be W/ or W/O Advantech logo

Ordering Information

Part No.	Description
EPD-303-N1001	3.7" EPD-303 NFC B/W/R Display Blue Fastener
EPD-303-N2001	3.7" EPD-303 NFC B/W/R Display
EPD-302-N1001	3.7" EPD-302 NFC B/W Display Blue Fastener
EPD-302-N2001	3.7" EPD-302 NFC B/W Display
EPD-304-N1001	3.7" EPD-304 NFC B/W/R/Y Display Blue Fastener
EPD-304-N2001	3.7" EPD-304 NFC B/W/R/Y Display

Optional Accessories

Part No.	Description
LEO-D30-RD1	NFC reader
199L000102T000	Fastener-badge for EPD-303
199L000101T000	Back Holder for EPD-303

NFC Writer/Reader

- Part Number: LEO-D30-RD1
- Protocols: ISO 15693/14443(A/B), FeliCa, Mifare
- Frequency: 13.56 MHz (+/-7 KHz)
- RF Output Power: 200 mW
- RF Output Impedance: 50 Ohm
- Input Voltage: 5 V_{DC}
- Host Interface: Micro USB
- Operating Temperature: 0 ~ 70 °C (32 ~ 158 °F)
- Dimensions: 121.5 x 74.2 x 14.5 mm (4.78 x 2.92 x 0.57 in)
- Weight: 37 g (0.081 lb)