

User Manual

EPD Device EPD-230, EPD-232 System Solution

Wireless ePaper Display Solution



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If you believe your product to be defective, follow the steps outlined below.

- 1. Collect all the information about the problem encountered. (For example, CPU speed, Advantech products used, other hardware and software used, etc.) Note anything abnormal and list any onscreen messages displayed when the problem occurs.
- 2. Call your dealer and describe the problem. Please have your manual, product, and any helpful information readily available.
- If your product is diagnosed as defective, obtain a return merchandise authorization (RMA) number from your dealer. This allows us to process your return more quickly.
- 4. Carefully pack the defective product, a completed Repair and Replacement Order Card, and a proof of purchase date (such as a photocopy of your sales receipt) into a shippable container. Products returned without a proof of purchase date are not eligible for warranty service.
- 5. Write the RMA number clearly on the outside of the package and ship the package prepaid to your dealer.

Declaration of Conformity

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for assistance.



If some optional modules are offered with the system, additional system certificates may be required in certain regions/countries. Please check with Advantech Sales or Product Manager for certificate application services.

FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE:

FOR MOBILE DEVICE USAGE (>20cm/low power)

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

FOR COUNTRY CODE SELECTION USAGE (WLAN DEVICES)

Note: The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all Wi-Fi product marketed in US must fixed to US operation channels only.

USER MANUAL OF THE END PRODUCT

In the user manual of the end product, the end user has to be informed to keep at least 20cm separation with the antenna while this end product is installed and operated. The end user has to be informed that the FCC radio-frequency exposure guidelines for an uncontrolled environment can be satisfied. The end user has to also be informed that any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment.

If the labelling area is small than the palm of the hand, then additional FCC part 15.19 statement is required to be available in the user manual: This device complies with Part 15 of FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

LABEL OF THE END PRODUCT:

The final end product must be labeled in a visible area with the following " Contains TX FCC ID: M82-EPD-023-053 ".

If the labelling area is larger than the palm of the hand, then the following FCC part 15.19 statement has to also be available on the label: This device complies with Part 15 of FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

NCC

低功率電波輻射性電機管理辦法

- 第十二條 經型式認證合格之低功率射頻電機,非經許可,公司、商號或使用者 均不得擅自變更頻率、加大功率或變更原設計之特性及功能。
- 第十四條低功率射頻電機之使用不得影響飛航安全及干擾合法通信;經發現有 干擾現象時,應立即停用,並改善至無干擾時方得繼續使用。前項合法通信,指 依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學 及醫療用電波輻射性電機設備之干擾。

Technical Supports and Assistance

- 1. Visit the Advantech website at www.advantech.com/support to obtain the latest product information.
- 2. Contact your distributor, sales representative, or Advantech's customer service center for technical support if you need additional assistance. Please have the following information ready before calling:
 - Product name and serial number
 - Description of your peripheral attachments
 - Description of your software (operating system, version, application software, etc.)
 - A complete description of the problem
 - The exact wording of any error messages

Packing List

Before system installation, check that the items listed below are included and in good condition. If any item does not accord with the list, contact your dealer immediately.

■ EPD-230, EPD-232 System Device

Ordering Information

Part No.	Description
EPD-023B2AG-NTC02	2.9" Black and White EPD solution in 2.4G
EPD-023B2AG-NTC12	2.9" Black and White EPD solution in 2.4G (MOQ 50pcs up, Honeycomb box)
EPD-232-001	2.9" R,B,W EPD solution in 2.4G
EPD-232-011	2.9" R,B,W EPD solution in 2.4G (MOQ 50pcs up, Honeycomb box)
EPD-230-001	2.9" Black and White EPD solution in 2.4G for upgrade certification
EPD-230-011	2.9" Black and White EPD solution in 2.4G (MOQ 50pcs up, Honeycomb box) for upgrade certification

Optional Accessories

Part No.	Description
1760002692-01	4 pcs CR2450 Panasonic Battery
1760002692-02	4 pcs CR2450 Toshiba Battery
1990036330T000	Mounting Bracket for 2.9" ePaper device
1990036333T000	Fastener Rubber 65x25.4x0.85 for 2.9" ePaper device

* The battery is consumables material, so it is not in 2 years warranty.

Safety Instructions

- 1. Read these safety instructions carefully.
- 2. Retain this user manual for future reference.
- 3. Disconnect the equipment from all power outlets before cleaning. Use only a damp cloth for cleaning. Do not use liquid or spray detergents.
- 4. For pluggable equipment, the power outlet socket must be located near the equipment and easily accessible.
- 5. Protect the equipment from humidity.
- 6. Place the equipment on a reliable surface during installation. Dropping or letting the equipment fall may cause damage.
- 7. The openings on the enclosure are for air convection. Protect the equipment from overheating. Do not cover the openings.
- 8. Ensure that the voltage of the power source is correct before connecting the equipment to a power outlet.
- 9. Position the power cord away from high-traffic areas. Do not place anything over the power cord.
- 10. All cautions and warnings on the equipment should be noted.
- 11. If the equipment is not used for a long time, disconnect it from the power source to avoid damage from transient overvoltage.
- 12. Never pour liquid into an opening. This may cause fire or electrical shock.
- 13. Never open the equipment. For safety reasons, the equipment should be opened only by qualified service personnel.
- 14. If any of the following occurs, have the equipment checked by service personnel:
 - The power cord or plug is damaged.
 - Liquid has penetrated the equipment.
 - The equipment has been exposed to moisture.
 - The equipment is malfunctioning, or does not operate according to the user manual.
 - The equipment has been dropped and damaged.
 - The equipment shows obvious signs of breakage.
- 15. Danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacture. Discard used batteries according to the manufacturer's instructions.
 - replacement of a battery with an incorrect type that can defeat a safeguard (for example, in the case of some lithium battery types);
 - disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery, that can result in an explosion;
 - I leaving a battery in an extremely high temperature surrounding environment that can result in an explosion or the leakage of flammable liquid or gas;
 - a battery subjected to extremely low air pressure that may result in an explosion or the leakage of flammable liquid or gas.

DISCLAIMER: These instructions are provided according to IEC 704-1 standards. Advantech disclaims all responsibility for the accuracy of any statements contained herein.

Consignes de Sécurité

- 1. Lisez attentivement ces instructions de sécurité.
- 2. Conservez ce manuel de l'utilisateur pour référence ultérieure.
- Débranchez cet appareil de toute prise secteur avant le nettoyage Utilisez un chiffon humide. N'utilisez pas de détergents liquides ni en spray pour le nettoyage
- 4. Pour les équipements enfichables, la prise de courant doit être située à proximité de l'équipement et doit être facilement accessible.
- 5. Gardez cet équipement à l'abri de l'humidité.
- 6. Placez cet équipement sur une surface fiable lors de son installation
- 7. Les ouvertures de l'enceinte sont destinées à la convection de l'air. Protégez le matériel contre la surchauffe. NE COUVREZ PAS LES OUVERTURES.
- 8. Assurez-vous que la tension de la source d'alimentation est correcte avant de connecter l'équipement à la prise de courant.
- 9. Placez le cordon d'alimentation de sorte que personne ne puisse marcher dessus. Ne placez aucun objet sur le cordon
- 10. Toutes les mises en garde et avertissements sur l'équipement doivent être notés
- 11. Si l'appareil n'est pas utilisé pendant une longue période, débranchez-le de la source d'alimentation pour éviter les dommages causés par des surtensions transitoires.
- 12. Ne jamais verser de liquide dans une ouverture sous peine de provoquer un incendie ou un choc électrique
- 13. Ne jamais ouvrir l'appareil.Pour des raisons de sécurité, cet équipement ne doit être ouvert que par du personnel qualifié
- 14. Si l'une des situations suivantes se produit, faites vérifier l'équipement par le personnel de service:
 - Le cordon d'alimentation ou la fiche est endommagé.
 - Un liquide a pénétré dans l'appareil.
 - L'équipement a été exposé à l'humidité.
 - L'équipement ne fonctionne pas bien ou vous ne pouvez pas le faire fonctionner conformément au manuel d'utilisation.
 - Equipment L'équipement est tombé et a été endommagé.
 - Equipment L'équipement présente des signes évidents de rupture.

AVERTISSEMENT: Cet ensemble d'instructions est donné conformément à la norme CEI 704-1. Advantech décline toute responsabilité quant à l'exactitude des déclarations contenues dans le.

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Product Overview

1.1 Introduction

EPD-230, EPD-232 is an ePaper device which Supportss ultra low power 2.4GHz RF wireless integrated with a 2.9" EPD with an ARM Cortex-M3 processor. The device is designed for hospital, pharmacy, factory, warehouse and retail applications. With optimization on power consumption and device management, low data rate applications can achieve years of battery life and thousand of device connections. Advantech's EPD-230, EPD-232 provides multiple interface for application control which is highly integrated with a low power consumption system. EPD-230, EPD-232 can auto join and bind the network with the Router (WISE-3240). Data can be quickly and easily acquired and transformed into different formats to communicate with the DeviceOn/ePaper Server.

The main features of EPD-230, EPD-232 are:

- ARM Cortex-M3 Core Processor
- Supports IEEE 802.15.4 / 2.4 G networks
- 2.9" e-Paper panel display
- Low power consumption and years of battery life
- Multiple I/O with 3 buttons & 3 LEDs
- Supports temperature ranges: 0 ~ 50 °C
- High Performance integrated system with RTOS
- Supports over-the-air upgrades (OTA)
- Available solution kit for various application deployments
- Supports with Colors Black/White in EPD-230 or Black/White/Red in EPD-232

	MCU	TI 32-bit ARM Cortex-M3 Processor
Computing System	Memory	RAM 28KB
Disular	Screen Size	79 x 36.7 mm
Display	Resolution	296 x 128 pixels
Storage	Internal	Flash: 128 KB
Storage	External	SPI Flash: 512KB
	Standard	IEEE 802.15.4
	Frequency Band	2.4-GHz
	Channels	11~26
	Channel Separation	5MHz
Network	Transmit Power	-21dBm~ +5dBm
	Receiver Sensitivity	-100dBm
	RF Data Rate	250 Kbps
	Function	End node
	Antenna	On-board Antenna
Interface	LED x3	
	Function Key x3	
Power	Battery	CR2450 x4
Color	Red/Black/White	
CUIUI	Black/White	

1.2 Specifications

	Operation Temperature	B/W: 0 ~ 40 °C, R/B/W: 0~40 °C
Environment	Non-Operational Temp.	-25 ~ 60 °C
	Operating Humidity	5 ~ 80% Relative Humidity, non-condensing
Physical Characteris-	Dimensions	100 x 47 x17.9 mm
tics	Weight	80g
Operating System	RTOS	

Note!

Image for EPD needs to follow these instructions.

- 1. Image needs to set as 296 x 128 pixels, do not resize which will cause jaggy edges
 - 2. 24 bit / BMP format for EPD-230, EPD-232
 - 3. Black: (0,0,0) / White (255, 255, 255)/ Red (255,0,0)

1.3 System implementation

The EPD device can be applied to different applications and system integrators can control the RESTful APIs to design for different scenarios.

1.3.1 Advantech EPD-230, EPD-232 & DeviceOn/ePaper Solution

Wireless EPD System consists of DeviceOn/ePaper, Router and EPD device.

- The DeviceOn/ePaper on ARK-2250L & ARK-1123H provide Web GUI to management the wireless EPD system.
- The Router (built-in WISE-3240) can extend wireless range.
- The EPD device is a device with ePaper, EPD controller and wireless connectivity.

Advantech provides a total solution for development to select the different architecture according to the end customer's system requirements.

EPD-230, EPD-232 is the end node of the system. Developers can apply Advantech WISE-3240 to connect to DeviceOn/ePaper which is installed in Advantech's Embedded Computer /EPD-Server.

Vertical Markets	Smart Factory	Smart Building	Smart Hospital	Smart City
RESTful Agent	Mobile BLE NFC	PC NFC 0365 PC Agent Outlook Agen	t Data Exchange E Agent Appli	By Application cation Agent
Centralized Management	Device	On/ePaper	ise Server Value Server	
Wireless Router/Reader	EPR-210	EEE 15.4 WISE-3240	ute WISE-3220	WISE-3270
ePaper Devices	2.9"	2.9" 5.6" EPD-230/EPD-232 EPD-332	13.3"	26"/ 31.2"



EPD-230, EPD-232 Network Specification

2.1 System Architecture





2.1.1 System Environment

No	Device1	OS	Version
1	ARK 2250L/DeviceOn/ePaper	Ubuntu	18.04
4	WISE Router: WISE3240	OpenWRT	15.05.1
6	EPD Device CC2650	TI RTOS	zstack 1.2.2a

2.2 System Specification

- 1. One single network can be built by WISE-3240.
- 2. One WISE-3240 can support up to 400 EPD devices in one channel.
- 3. Supports 11 channels in this system.
- 4. Supports up to 10000 EPD devices in one system by 25 pcs routers.
- 5. System supports whitelists to join the system from DeviceOn/ePaper.
- 6. Supports changeable encrypted keys.

2.2.1 DeviceOn/ePaper

- GUI operate the system, EPD device and Router.
- Through RESTFul API, the external system can operate the whole system as shown below:
 - 1.DeviceOn/ePaper can perform WISE Router actions and control WISE Router.
 - 2.DeviceOn/ePaper can perform EPD device actions and control EPD series device.
 - DeviceOn/ePaper can import the EPD device onto the whitelist to join the network.
 - 4.DeviceOn/ePaper can deliver the image/firmware to EPD device through WISE Router.
 - 5. Device can periodically report status back to DeviceOn/ePaper.

2.2.2 EPD Device

- A device can join the router when a corespondent LQI values can be detected and qualified.
- Supports router re-scan: if an EPD device fails to join after 2 mins the EPD device will start to look for new router.
- Supports status reports every 1 mins after a device joins the network.
- Supports sending data requests every 20 secs after a device joins the network.
- Supports emergency and event status reports every 1 mins after joining the network
 - Battery status report
 - Hardware malfunction reports for panel errors and external-flash errors
 - exception handling: image CRC failing
- Device Battery: CR2450 x 4 pcs
 - The Battery life time can re-fresh images on screen 35000 times for EPD-230, EPD-232 to transfer images from the router to the EPD device (under a typical 25 degree environment.)
- Supports multi-image storage.
 - Full size image: EPD-230, EPD-232: 20 pages in total. The first 3 pages are mapped to the 3 buttons. The other 17 pages can be controlled from the DeviceOn/ePaper directly.
 - Supports de-compression on the device side.
- Supports execute device action from the router.

2.3 System Network Specification

- Physical transmission data rate is 250 Kbps
- Network join performance
 - a. 1 pcs EPD device takes 6 secs to join the network.

b. 400 pcs EPD device join network in 30 minutes by 1 host WISE-1840 on WISE-3240.

- Data transfer performance from Router
 - Update 400pcs EPD-230, EPD-232 in 1 hours
 - 2 way communication
 - Communication with encrypted AES128



The performance will be adjusted according the environmental limitations.



2.4 EPD System-Initial Flow on Device Side

This section will explain how the end device joins, registers, and communicates with the router. Users may change some parameters to fit their own scenario.



2.4.1 EPD Device Scan for Router

- Initial scan: EPD device scans each available channel. If the EPD device still can't find the router after 2 mins, it will change the status to "lost connection".
- Reconfirm scan: The device will start to scan the channel to look for another router every 2 mins. If a device still can't find the router after 5 attempts, it will rescan the channel every 4, 8, 16, 32 mins, then every 64 mins for 5 days. Finally the device will move to deep sleep mode after scanning for 5 days continuously.
- Stop scanning and deep sleep: If the EPD device still can't find the router, it will stop RF Scanning and go back to deep sleep mode until the button of the device has been pressed. The device will start scanning from the beginning.



2.4.2 Registration

- Router
 - Router Power on
 - System gets EPD Hub Configure from webpage
 - Router connects to DeviceOn/ePaper
- EPD Device
 - Default setting for shipping: Supports 11 channels.
 - Power on auto check if a router exists and asks to join the network.
 - Router permits EPD device to join if it is on the whitelist.
 - EPD device joins the network

2.4.3 Status report

- Router (WIS-3240) will report status every 1 mins.
- EPD device will report status every 1 mins.

2.4.4 Execute actions Cmd

- Router will receive action commands from the router in real-time.
- EPD device sends data requests every 20 secs from sleep mode to router to check if there are any action commands.
- EPD device will send back the ACK turn result if the action command is executed.

2.5 Whitelist mechanism

Before importing the whitelist, the user needs to setup a router channel which can provide optimal performance. Users can setup the channel from DeviceOn/ePaper and the router channels are: 11 13 14 15 20 21 22 23 24 25 26. If the channel has not been set, the router will be set to the default channel of 15.

(1). When a user receives the goods, it comes with an EPD device whitelist. Users need to import the list from DeviceOn/ePaper.

(2).DeviceOn/ePaper can dispatch the list to the connected system daemon in the Router.

(3) EPD device can auto join the network after the whitelist has been properly setup in DeviceOn/ePaper and Router.



End users need to be aware which 2.4Ghz wi-fi channels have been used to avoid to using the same channels.



2.6 Secure Key Mechanism

Advantech EPD-230, EPD-232 asks users to change the secure key when data exchanges between devices. Users can setup a new secure key from DeviceOn/ ePaper and the router will start passing the new key to connected devices. As long as the key has been changed, the device can not operate in the original system which has a different secure key setting.

- Data communication is encrypted by AES128
- Users can define a 128 bit secure key
- The Router exchanges keys to devices automatically



Hardware Specification

3.1 System Specification

EPD-230, EPD-232 is designed for customers to directly install on the application side.

3.1.1 ID Dimensions









3.1.2 Battery Installation

1. Connect the power connector into the board connector.



Chapter 3 Hardware Specification

2. Put the battery back into the housing.



3. Replace the back cover.



4. Screw it back on to finish.



3.2 Device LED Button Behavior

3.2.1 EPD-230, EPD-232 button behaviors:

item	Status	Action	Result
1	SW1 (P1) no press	Press button for 0.5 sec and release button	Refresh EPD to Page 1
2	SW2(P2) no press	Press button for 0.5 sec and release button	Refresh EPD to Page 2
3	SW3 (P3) no press	Press button for 0.5 sec and release button	Refresh EPD to Page 3
4	Press SW1(P1) & SW3(P3)	Step1: Long press button (SW1 & SW3) when LED1,LED2 and LED3 off Step2: LED2 flash (0.5 sec toggle LED2) after hold SW1& SW3 for 5 sec Step3: LED2 on after hold SW1 & SW3 for 10 sec Step4: Release SW1 & SW3 keys then LED2 off	Reset to default and reboot Note: All images and set- tings in the device will be deleted.
5	If device loses con- nection, press either SW1\SW\SW3	Press and release button.	Leave sleep mode and try to connect to a network .

3.2.2 EPD-230, EPD-232 LED behavior

Remote control commands from the Router.

ltem	Status	Action	Result
1	LED1	Remote Control by DeviceOn/ePaper API	On/Off/Blink
2	LED2	Remote Control by DeviceOn/ePaper API	On/Off /Blink
3	LED3	Remote Control by DeviceOn/ePaper API	On/Off/Blink



EPD-230, EPD-232 in DeviceOn/ePaper

4.1 EPD-230, EPD-232 with DeviceOn/ePaper Solution

Previously, we looked at EPD-230, EPD-232 as an end device. To build up a solution, we need a router to connect to our CMS: DeviceOn/ePaper provides a complete solution to help you import device data, design templates and manage devices easily. This user manual will help you to build a total solution system.



DeviceOn/ePaper provides a complete solution to help you easily import device data, design device templates, and manage devices. The main features are listed below.

Table 4.1: DeviceOn/ePaper main feature list					
ltem	Name	Description			
1	Overview	System dashboard			
2	EPD controller	Control & manage EPD device and association with tar- get			
3	Item data	Data management and Target product data			
4	Device list	Router / EPD devices management & import			
5	Template	EPD image design and generation			
6	Whitelist setting	EPD whitelist			
7	OTA	Firmware upgrade			
8	Settings	System management including user account, device group, server activation, and email notify			
9	Document	Online document and the testing tool for RESTful API			

4.2 Preparation

4.2.1 Hardware Component List

- 1. Advantech Embedded Computer: ARK-2250L or ARK-1123H
- 2. Advantech IoT Router: WISE-3240 & Advantech EPD devices.

4.2.2 Software Component List

- 1. Ubuntu 18.4 for ARK-2250L & ARK-1123H
- 2. DeviceOn/ePaper Installation & License on ARK-2250L & ARK-1123H
- 3. 500 connection licenses on ARK-2250L & ARK-1123H.

4.2.3 DeviceOn/ePaper setup on ARK

The following diagram demonstrates the process of ePaper Manager operation.



4.2.3.1 Activate the Server

Activate the Server	•	How to configure your FTP server on ePaper manager	•	Setup WISE-3240 with ARK and DeviceOn/ePaper	•	Add Group & Device into ePaper Manager
						-
EPD controller for EPD device management	•	Data import and generate template	(DeviceList Setup: EPD power-on and join network online	(Mac address of EPD device Import into white List
-						
Template & data binding	•	EPD controller associate the device and data	•	EPD System automatically operate		

1. Click the System in Setting.

•	Overview agement			
•	Setting			
0	Email Service Setti Set up Email service for retreiving event notifications in no time	Activate Server Activate this product with a license key to continue web service	Server Configuration Server configuration and data can be view and edited here	Rule Setting The rule for device abnormal warning can be setted here
1	Send Email for Testing 🖋	Click Here 🖋	Click Here 🖋	Click Here 🖋
6.				Device Operation System
	OAII - ALL - 🖸 🗎			搜察
8	Severity		Event Description	
2	Device add succ	cessfully		
	Error Device add failed	d		
	Device upgrade t	failed		

2. Click the Activate Server and enter the License Key provided in our sales package.

0	🗲 System Management		
۲	Setting		
		Activate Server	
	Email Service Setting	A Version ttic	
<u>.</u>	Set up Email service for retreiving event notifications in	Ac lico Profession	
	no time	se License Quantity	
•	Send Email for Testing 🖋	626 / 500 (Assigned / Licensed)	
/		License Key	
~		1-1NX8T0A	
0	OAH - ALL - C H		
00	🕑 Severity 🗧	OK Cancel	
	Information Device add successfully		







1. Click the **Storage** button item under the OTA icon.

0	Storage Management				
I	+			s	learch
	Storage Name 🗢	Туре	Security	Max Connections	Operation
	> local	FTP	NONE	■ 5 🖵 30	× ×
2	4				
2				Total 1 5/page	✓ < 1 >
r.					
C	OTA				
×	1 Upgrade				
0	Package				
	🖴 Storage				

 Click the Edit icon and enter information for Storage Name, Security, Domain, Port, and Account Name as shown below. Storage Name: local [default] Security: NONE Domain: [Your Server IP] Port: 21 Account Name: user1 [default] Password: 123456 [default]

•	G Storage Management	Edit FTP Storage
m	•	* Storage Name Hocat
	storage Name -	* Security NONE FTPS FTPES
.	4	* Domain 172.22.13.14 Total 1 Spage < 1 >
/		Port 21
2 6%		* Account Name user1
		Back Confirm

3. Scroll down to choose the values for CMC and SMC and click Confirm.

+	* Password							
Storage Name 🗢							Max Connections	Operation
> local	Root Path	/data/					≣ 5 🖵 30	× ×
τ.	* CMC ?		30	+				
	* SMC ?	-	5	+			Total 1	5/page ~ < 1
	Description:	mark	/note, etc					
					ĥ	-		
		Back						

4. If successful you will see the system show the Success screen, then click **OK**.



4.2.4 Setup WISE-3240 with ARK and DeviceOn/ePaper



- 1. Power on WISE-3240 and connect with your laptop or PC.
- 2. Open WISE-3240 management web page: Open a web browser (Chrome is suggested) and enter the IP Address: http://192.168.1.1
- 3. Login: The default the username and password are **root** and **ePaper**. Click the Login button to open the web configuration page.

ADVANTECH	
Authorization Re Please enter your username and	quired password.
Username	root
Password	•••••
🗈 Login 🔕 Reset	

4. Click EPD Hub Configuration.

ADVANTECH Status + System + Security + Network	< + ePaper Manager + Logout
ePaper Manager User can configure IP address connect to ePaper Manager server.	EPD Hub Configuration EPD Deployment
Configuration	
Server IP 172.22.12.88	
	Save & Apply Save Reset

5. Enter the server IP address and click **Save & Apply.**

ADVANTECH	Status + System + Security + Network ·	* ePaper Manager * Logout
ePaper Mana	ger	EPD Hub Configuration
User can configure IP add	lress connect to ePaper Manager server.	EPD Deployment
Configuration		
Sen	ver IP 172.22.12.88	
_		
		Save & Apply Save Reset

4.3 Hands-on EPD Device on DeviceOn/ePaper

The following figure demonstrates the usage scenario for a factory production line.

- 1. EPD device mac address.
- 2. Target Item data contains unique ID such as the key e.g. PN (part number).
- 3. Target Item ID is the key e.g. PN (part number).
- 4. EPD device screen setup is via the EPD image template.



4.3.1 DeviceOn/ePaper Login

Login to your ePaper Manager by entering the IP address. Enter the default User name and Password. User name: **root** Password: **P@ssw0rd**

X A	
, <mark>∟</mark> _ ePaper	
Sign in to EPD root	
Remember me !	
	\leq

If the user wants to change the password, please click root and click change password. Then click $\ensuremath{\mathsf{OK}}$.

ontro																	
onuc	olling M	anagem	ent												\bigcirc		
	root	-	G	iroup	AEDEMO	•	Status	All		•	M	ode			\bigcirc		
															root		
ver 🕴	RSSI 🔅	Mari	k 🍦	Tag Nar	me		Item &	Template				А		9	Role uper admi	n	
	0	2019	08 02	EPD-053R			LK-201(EPD-	053)	ø	23	۲	ø					
0 76	-860BM			00000001-0000-0000-	0012-4b001ae6d	ddf3	Meetin	gRoom_ori			Preview Re		Ch	ange p	assword	Sign	out
		MCU S32k	(144 32-bit	EPD-023B EPD-Tag-abc360			771-FS32K146HNT0V	LLV(EPD-023)	1	23	۲	Ø	\$	Ð	~	Ĩ	
JU 76	-90dBm			00000001-0000-0000-	0012-4b001dabc	c360	Chij	oOrder1			Preview Re		insmit C	ancel	Monitor	0 L	ist
)	⊘ 07-ID	MCU ARM	Cortex-M3	EPD-023B EPD-Tag-562185			634-JG12B500FGM4	BC(EPD-023)	ø	85	۲	ø	*	5	~	e	1
10 10	-0/upm			00000001-0000-0000-	0012-4b0016562	2185	Chip	oOrder1			Preview Re		insmit C	ancel	Monitor	0 L	ist
A	ccount		root	*	Gro	oup		Cha	nge	e Pa	asswoi	rd			T		•
A	ccount ວ		root	•	Gro	oup	* Old Pass	Cha	nge	e Pa	asswoi	rd					•
A I Statu	ວ s P	ower 4	root RSSI	- Mark	Gro	oup	* Old Pass	Cha word	nge	e Pa	asswoi	rd					•
A Statu	S P S S	Power	RSSI	Mark 2019.0	Grc	oup €P EPD-	* Old Pass	Cha word	nge	e Pa	asswoi	rd				1	•
A Statu 20 j	ວ s P	Power	RSSI -85dBm	- Mark 2019 0	Gro 1 8.02	• EP EPD- 00000	* Old Pass	Cha word	nge	e Pa	isswoi	rd				1	•
A Statu 20 j	S P	cower 7	RSSI © -85dBm	Mark 2019.0	Grc 8.02	► EP EPD- 00000	* Old Pass	Cha word	nge	e Pa	asswol	rd			i 123)	1	•
A Statu 20 J	CCOUNT C S S P D D D S D D S D D S	Power	root RSSI -85dBm -90dBm	Mark 2019.0 MCU S32K1	Grc 8.02 144 32-bit	EPD- 000000 EPD- 000000000000000000000000000000000000	* Old Pass	Cha word	nge	P	asswol	rd			i 123)	1	•
A Statu 20 J	S P	bower 1	root RSSI -85dBm -90dBm ⊗	Mark 2019.0 MCU S32K1	Grc 8.02 144 32-bit	EP EPD- 00000 EPD- 00000	* Old Pass	Cha word sword	nge	P	asswol	rd			i 123) 123)	1	-
A Statu 20 J Om	S P	Power	root RSSI -85dBm -90dBm -86dBm	Mark 2019.0 MCU S32K14	Gro 8:02 144 32-bit 8 144 LQFP	• EP EPD- 00000 • EP EPD- 00000	* Old Pass	Cha word sword	ord	Pa	asswol	rd			i 123) 123)	1	•
A Statu 20 J	D s P bbs	Cower 7	root RSSI -85dBm -90dBm ⊗ -86dBm	Mark 2019.0 MCU S32K148	Grc 8.02 144 32-bit 8 144 LQFP	EP EPD- 000000 EPD- 000000 EPD- 000000 EPD- 000000 EPD- EPD- 000000	* Old Pass	Cha word sword New Passw	ord	P	asswol	rd			i 123) 123)	1	
A Statu 20 J 0m	S P s P obs	Power 1 70% 100% 100%	root RSSI -85dBm -90dBm ⊘ -86dBm -86dBm	Mark 2019.0 MCU S32K1 MCU S32K148 2019.0	Gro 8.02 144 32-bit 8 144 LQFP 8.02	EP EPD- 00000 EP EPD- 00000 EP EPD- 00000 EP EPD- 00000 EP EPD- 00000	* Old Pass	Cha word sword New Passw	ord	• Pa	asswol	rd			i 123) 123)	1	•
A Statu 20 J Offi	Count S P Sobs	Power 7 70% 100%	root RSSI -85dBm -90dBm -86dBm -48dBm	- Mark 2019.0 MCU S32K140 MCU S32K140 2019.0	Grc 8.02 144 32-bit 8 144 LQFP 8.02	EP EP EP O0000 EP EPD- 00000 EP EPD- 00000 EP EPD- 00000	* Old Pass * Old Pass * New Pass * New Pass * Confirm I * Confirm I	Cha word sword New Passw	ord	⇒ Pa	Cancel	rd			i 123) 123)	1	

4.3.2 Add Group & Device into DeviceOn/ePaper



1. Add group by clicking add icon in **Device Group** in Setting.

Account	root	•					
+ / =						Search	
	Group Name		Parent Group		Child Groups	Description	
test		Not Set		Not Set		Not Set	
Austin		Not Set		Not Set		Not Set	
SimDevice		Not Set		Not Set		Not Set	
EDD132ncc1501 Setting		Not Set		Not Set		RDtest	
I Role		Not Set		Not Set		Not Set	
 Account Image: Device Group ✓ System 	5 rows per page	ge				c 1	2 3 4 :

2. Add group by entering the **Group Name** and **Description (optional)**, then click Save.

0	< Back	
۲		
=	Account	root
1	Group Name	eTest 🗸
ŧ.	Description (optional)	Fortestingusage 🗸
2	Parent Group (optional)	Choose one parent group ~
3		
		Save

3. Add Router to Group.

Account root		•	Group		test	•	Status	All	
+ / 0	ŵ								
Devi	ce Name		Panel Type				Messages		
EPD-Tag-364455			EPD-322B	Disconr	Disconnected				
EPD-Tag-364455			EPD-322B	Disconr	nected				
EPD-Tag-02d9ae			EPD-132R	Disconr	nected				
EPD-Tag-02d9b0			EPD-132B	Disconr	nected				
EPD-Tag-02d99c			EPD-132B	Normal	Normal				
Showing 1 to 5 of 10	rows 5 - row	e nor nano							

0	< Back									
•	Add Device - Normal View									
A E		Status 🔻	Device Name			Agent ID				
P		٠	EPD-Router-482354		00000001-0000-0000-0012-460019482354					
0		۰	EPD-Tag-478245		00000001-0000-0000-0000-74fe4b478245					
2		٠	EPD-Router-48220c		00000001-0000-0000-0012-46001948220c					
Q°		۰	EPD-Tag-0001d8		00000001-0000-0000-4444-0404000001d8					
₽		•	EPD-Tag-561581		00000001-0000-0000-0012-460016561581					
	Showing	1 to 5 of 529	rows 5 rows per page							


Chapter 4 EPD-230, EPD-232 in DeviceOn/ePape

4. Legal ePaper device joins the network.



Import the whitelist Import the Mag address of the EDD device

Import the Mac address of the EPD device list into DeviceOn/ePaper. **Note:** Users may receive the mac address file when the EPD device ships.

- Single Item Added.
 - Click "+" icon to Add single EPD tag to your Router.
- Multiple Items Added Click Upload white list file to add multiple EPD tags to your router.

White L	ist Setting		
★ + ★	<i>σ</i> 🔋 🖵 ¥ ≞	Add single EPD tag	O Upload file format
Add sing	le EPD tag EPD List	Router	
Opload white list	file EPD Import List	+ 82354	P
	Q. Search	Q. Search	
0	🗆 00124b0016561b81 - Austin 🗞	00124b001ae6d52d	
<u>×</u>	🗆 00124b00211d3a9e - Austin 🗞	00124b00192cfe63	
	🗆 00124b00174972b9 - Austin 🗞	□ 00124b0016561e81	
0	🗆 00124b00174971e9 - Austin 🔂	00124b001ae6de15	
00	🗆 00124b0016562583 - Austin 🔁	• 00124b00192d1c54	
2	🗆 00124b001dabc32c - Austin 😵	00124b00192d1d17	
	🗆 00124b001ae6ec15 - Austin 💫	O 00124b001ae6dede	
	🗆 00124b0016562602 - Austin 🗞	00124b001ae6df2d	
	🗆 00124b0016562604 - bn 🗞	□ 00124b001ae6ded0	

0	White List Setting				
۲	1 + # 8 🖵 ¥ B				
		EPD Import List			
_		Q. Search	Rules for Uploading a	file	
-		00124B002133B56D - bn	Now we support three file types: JSON, Exce JSON format (Example JSON file must	el, and CSV. be UTE-8	
-		00124B002133B546 - bn	encoded)		
1		00124B002133B506 - bn	{ "tags": [
0		00124B002133B699 - bn	{ "mac": "00124b0015577208",		
¢°		00124B002133B6AC - bn	group : 1)- },		
8		00124B002133B6E7 - bn	"mac": "00124b0015577209", "group": "1F"		
		00124B002133B3E8 - bn	1		
		00124B002133B512 - bn	÷		
		00124B002133B504 - bn	Excel/CSV format (Example, CSV file m	ust be UTF-	
		00124B002133B528 - bn	8 encoded)		
		00124B0016561703 - bn	mac	group	
		00124B001DABC373 - bn	00124b0015577208	1F	
		Select All	00124b0015577209	1F	
			ок		

EPD-230, 332 whitelist setting.

The user needs to import the device list and then the device can join the network.

Add EPD device into DeviceOn/ePaper whitelist. There is a mac address label on the EPD-230, 332 back, users may scan QR Code to map the target item.



- Dispatch the EPD device to the Router
- (Option) Setup Router Channel
 - Refer to #4.3.2 item 7. Setup Router Channel.
- Wakeup EPD device from sleep mode
 - Press the button and release it.

5. Add EPD device into a Device Group



1). EPD device online. Click any button of the EPD device and you will see it online (30 mins for 400 pcs).

2).Click device list on the side bar menu, and select the group you want to add devices to.

Account	•	Group	AEDEMO	*	Status	All	*	Mode	C	Device 👻	
+ / 0 1									Search		
Device Name	¢ Pa	nel Type 🕴			Messages				Channel 🕴	Last Online Tir	me
Device List	EPD-	053R Nor	mal							2021/2/9 9:9:21	
EPD-Tag-abc360	EPD-	023B Nor	mal							2021/2/8 11:35:54	ı
EPD-Tag-562185	EPD-	023B Nor	mal							2021/2/8 11:36:23	3
EPD-Tag-e6d52d	EPD-	053R Nor	mal							2021/2/9 11:4:21	
EPD-Tag-562805	EPD-	053R Nor	mal							2021/2/8 11:35:46	5
Showing 1 to 5 of 8 rows 5.	rows per page									c 1	2

3). Click the add button on the top-left corner.

•	Account	root	- Group		AEDEMO	•	Status	All	•	Mode	C	Jevice +
	+ / 0 1									S	Search	
	Device M	lame	Panel Type				Messages			¢ Chanr	nel 🕴	Last Online Time
	EPD-Tag-e6ddf3		EPD-053R	Normal								2021/2/9 9:9:21
	EPD-Tag-abc360		EPD-023B	Normal								2021/2/8 11:35:54
	EPD-Tag-562185		EPD-023B	Normal								2021/2/8 11:36:23
	EPD-Tag-e6d52d		EPD-053R	Normal								2021/2/9 11:4:21
	EPD-Tag-562805		EPD-053R	Normal								2021/2/8 11:35:46
	Showing 1 to 5 of 8 rows	5 - rows per pag	10									(1 2

4). Choose the hierarchical view. (If you have finished the whitelist setting previously, you will see the devices grouped under a router.)

۲	🖵 Add	1 Device -	Normal View	Hierarchical View
				Search
۵.		Status 🚽	Device Name	+ Agent ID +
P		٠	EPD-Tag-e6ec05	0000001-0000-0012-4b001ae6ec05
4		•	EPD-Tag-561703	00000001-0000-0012-4b0016561703
0			EPD-Tag-e6ea83	00000001-0000-00012-4b001ae6ea83
¢;		٠	EPD-Router-e714aa	0000001-0000-0012-4b0018e714aa
8		•	EPD-Router-e714a8	0000001-0000-0012-4b0018e714a8
	Showing	1 to 5 of 21 r	ows 5 - rows per page	<
				Finith

5). Open the hierarchy view until you see the device. Change the show number in order to select all devices under this router.

_	Status		Device Name			
~		EPD-Router-482354		00000001-0000-0	000-0012-460019482354	
	Status 👙		Device Name			Agen
	•	EPD-Tag-e8ec05		00000001-0000-0000-0012-4	b001ae8ec05	
	•	EPD-Tag-561703		00000001-0000-0000-0012-4	60016561703	
Showing	1 to 2 of 2 ro	MG				
_						
·	1	EPD-Router-483078		00000001-0000-0	000-0012-460019483078	
~	2	EPD-Router-483078		00000001-0000-0	000-0012-460019483078	
~] □	Status #	EPD-Router-483078	Device Name	00000001-0000-0	000-0012-460019483078	Agen
	Status (EPD-Router-483078	Device Name	00000001-0000-0	000-0012-460019483078 600-0012-460019483078	Agen
	Status •	EPD-Router-483078 EPD-Tag-e8ddr3 EPD-Tag-a8c380	Device Name	00000001-0000-0012-41 00000001-0000-0000-0012-41	000-0012-460019483078	Agen
	Status •	EPD-Router-483078 EPD-Tag-e8ddf3 EPD-Tag-80200 EPD-Tag-802186	Device Name	0000001-000-000-0012-41 00000001-0000-0000-0012-41 00000001-0000-0000-0012-41	000-0012-460019483078 0001 #68.64f3 0001 #68.64f3 0001 #68.62188	Agen
	Status (EPD-Tag-e8ddf3 EPD-Tag-e8ddf3 EPD-Tag-e8ddf3 EPD-Tag-e8ddf3 EPD-Tag-e8d52d	Device Name	00000001-0000-0012-41 00000001-0000-0000-0012-41 00000001-0000-0000-0012-41 00000001-0000-0000-0012-41	000-0012-460019483078 0001ae6ddf3 0001dabc380 0001682185 0001662185	Agen

6). Select all by click the checkbox above.

0	< Back				
۲			lierershied View		
▦	Y Add L	Jevice - r	hierarchicar view		
		Status		Device Name	
A =	~ ©	1	EPD-Router-482354		00000001-0000-0002-4b0019482354
Ģ					
6					
2		Status		Device Name	
<i>`</i> а		٠	EPD-Tag-e6ec05		00000001-0000-0000-0012-4b001ae6ec05
e e		•	EPD-Tag-561703		00000001-0000-0000-0012-4b0016561703
	Showing 1	to 2 of 2 ro	ows		

7).Click the finish button to finish the selection.

Note: It's an optional step, since the system already has encrypted keys to protect all transmission data.

					/ Device / Add
					Normal View
Device Name			Agent ID		
		00000001-0000-0000-0012-4b0019482354			
				Search	
lame			Agent ID		
	00000001	-0000-0000-0012-4b001ae6ec05			
	00000001	-0000-0000-0012-4b0016561703			
		00000001-0000-0000-0012-4b0019483078			
		00000001-0000-0000-c400ad490001			
					Finish

Device Name	00000091-0000-00012-450019482254	Agent ID
Device Name 000	Successi	Agent ID
83078	Device is added successfully	

6. Set Router Encrypted Key

Note: An optional step, since the system already has an encrypted key to protect all transmission data.

1).Click Device List on the side bar menu, and select the device group for the router.

0	🖵 Device Manage	ment								
۲	Account	root	•		Group	AEDEMO	-	Status	All	•
	+ / 0 🟛									
<u>A</u> Ξ	Device Name		Panel Type	e ¢				Messages		
	EPD-Router-483078		÷	Norm	al					
0	EPD_Hub		-	Norm	al					
*	Showing 1 to 2 of 2 rows									
C										
00										
₽										

2). Find the router device, and change to edit mode by clicking the edit button.

0	🖵 Device Mana	gement			
۲	Account	root	•	Group	AEDEMO -
⊞					
	+ / 0 💼				
(AE)	Device Nam	ie	Panel Type		
P	EPD-Router-483078			Normal	
0	EPD_Hub		123	Normal	
»K	Showing 1 to 2 of 2 rows				
С					
¢					

3). Click the name of router device to enter edit mode.

0	🖵 Device Manag	gement				
۲	Account	root	•	Group	AEDEMO -	
	+ • • •					
	De	vice Name	Panel T	Гуре		
P	EPD_Hub		<i>.</i>	Normal		
4	EPD-Route	r-483078	π	Normal		
0	Showing 1 to 2 of 2 rows					
00						

4.) Fill in the Encrypted Key field (32-characters with A-Z and 0-9), then click **Save** to finish the configuration.

0	Overview	
۲		
	Device Name	EPD_Hub
-	Agent ID	00000001.0000.0000.0000.400001
<u>غ</u>	Agentio	0000001-0000-0000-00000001
	Device Groups	AEDEMO -
Υ.		
0	Encrypted Key	Please Enter Encrypted Key Save
1		
·		
C		
¢\$		
₽		

7. Setup Router Channel on WISE-3240

1). Click Device List on the side bar menu, and select the device group for the router.

0	🖵 Device Manage	ment							
۲	Account	root		Group	AEDEMO	-	Status	All	-
⊞				-					
	+ / 0 =								
<u>ه</u>	Device Name		Panel Typ	9 0			Messages		
	EPD-Router-483078		-5	Normal					
۵	EPD_Hub		-	Normal					
ם	Showing 1 to 2 of 2 rows								
С									
¢°									

2). Find the router device, and change to edit mode by clicking the edit icon.

0	🖵 Device Mana	igement					
۲	Account	root	•		Group	AEDEMO -	
⊞	_						
	+ / 0 💼						
<u>ه</u>	Device Nar	ne	Panel Type				
P	EPD-Router-483078	3	(+)	Norm	al		
۵	EPD_Hub		-	Norm	al		
×	Showing 1 to 2 of 2 rows						
С							
Q ⁰							

3). Click the name of router to enter edit mode.

0	🖵 Device M	lanagement				
۲	Account	root		Group	AEDEMO -	Status
⊞						
	+ 💿 O	a				
		Device Name	Panel	Туре 🕴		Messages
		_Hub	1	Normal		
6		-Router-483078	-	Normal		
c	Showing 1 to 2 of 2 ro	DWS				

4). Change the Channel (11,13,14,15,20,21,22,23,24,25,26 are available), and then click **Save** to finish the configuration.



4.3.3 Import Item Data to DeviceOn/ePaper



There are two ways to import data from vertical market applications to our DeviceOn/ ePaper.

1) JSON Format: Use APIs to update data in real time.

In order to import data to EPD, use the JSON format schema. See code below for ref. **Note:** Code must be a unique ID in the JSON format.

{ "items": [{ "code": "uniqueID_user_provide_1", "name": "item_name_user_provide_1", "content": { "device Content Title 01": "device Content01", "device Content Title 02": "device Content02" } }, { "code": "uniqueID_user_provide_2", "name": "item_name_user_provide_2", "content": { "device Content Title 11": "device Content11", "device Content Title 12": "device Content12" } },] }

2) Batch data updates into DeviceOn/ePaper database using Excel or CSV format.

If you upload Excel or CSV to the system directly, the system will auto transfer the format to JSON.

Note: The first column of data must be a unique ID in Excel or CSV format for overall item data.

Example1:

i. Vertical application scheduling sends data to the DeviceOn/ePaper server

ii. Click the **Data** icon on the left-side navigation bar and click left side button as shown below. The detail steps are demonstrated as below.

Step1. Click **Data** icon.

EPD-053 E	PD-023	MeetingRoom	WholeDaySchedule	TestWholeDay test	TestScTable	EPD_CAR	+ Add			
1 🕀 Թ										
roomID		date	0 ext	subject		nextTime		nextExt		nextAppointe
LK-201		2019.08.02	#8868	meeting	1	6:30~17:30		#9362	黃文勇	
LK-205		2019.08.02	#9631	F/W meeting	F	REE				
LK-207		2019.08.02	#9438	ME weekly meeting	Y	es				
LK-203			#9294	Product Training	F	REE				
LK-206		2019.08.02	#7097	[Campus Tour] 中銅	F	REE				
Showing 1 to 5 of 9	rows 5	. rows per page								

Step2. Click "+Add" and enter the group name

0	Item Data M	lanagement					
۲	EPD-053 EPD-023	3 MeetingRoom 1	WholeDaySchedule	TestWholeDay test	TestScTable EPD_CAR	+ Add	
=							
14	±						
(AE)	roomID	date	é ext é	subject	nextTime	nextExt	nextAppointer
	LK-201	2019.08.02	#8868	meeting	16:30~17:30	#9362	黃文勇
	LK-205	2019.08.02	#9631	F/W meeting	FREE		
•	LK-207	2019.08.02	#9438	ME weekly meeting			
*	LK-203		#9294	Product Training		\bigcirc	
	LK-206	2019.08.02	#7097	[Campus Tour] 中鲷			
¢	Showing 1 to 5 of 9 rows	5 - rows per page					
					Please	enter a group	name
					1		
						~	
						OK Cancel	

± ⊕ ↔	
roomID date ext subject nextTime	nextExt nextAppoi
LK-201 2019.08.02 #8868 meeting 16:30~17:30	#9362 黃文萬
LK-205 2019.08.02 #9631 F/W meeting FREE	
LK-207 2019.08.02 #9438 ME weekly meeting	
LK-203 #9294 Product Training	
LK-206 2019.08.02 #7097 [Campus Tour] 中興	
showing 1 to 5 of 9 rows 5 + rows per page	$\mathbf{\cdot}$
	Incher ant file
	Import file
This option w	ill remove all items in this group. Are you sure to proceed?

Step3. Click the Upload new items icon to import file

Step4. Choose the Excel file to import, and it will show Uploaded successfully!



0	🎟 Item Data N	lanagement					
۲	EPD-023 MeetingF	Room WholeDaySch	nedule TestWholeD	ay test TestScTable	EPD_CAR EPD-053	053Test + Add	
	± • •						
<u>A</u>	roomID	date	ext	subject	nextTi	me nextExt	nex
	201	2019.08.02	#8868	meeting	16:30~17:30	#9362	0000
	202	2019.08.02	#9631	F/W meeting			
•	203	2019.08.02	#9438	ME weekly meeting		(\cdot)	
*	204		#9294	Product Training		(1)	
c	205	2019.08.02	#7097	(Campus Tour)		\bigcirc	
0%	Showing 1 to 5 of 9 rows	5 - rows per page			Upd	ating Items Sta	atus
₽						Upload successfully!	

Step5. Check the uploaded file data.

	EPD-023 MeetingR	toom WholeDaySchedule	TestWholeDa	test	TestScTable	EPD_CAR	EPD-053	053Test	+ Add		
	•										
	roomID	date	ext 0		subject		nextTin	ne 🌵	nextExt		nextAppointe
4	201	2019.08.02	#8868	meeting			16:30~17:30		#9362	006	i ∳
1	202	2019.08.02	#9631	F/W meeting			FREE				
14	203	2019.08.02	#9438	ME weekly meet	ting		Yes				
-	204		#9294	Product Training			FREE				
1	205	2019.08.02	#7097	[Campus Tour] (000		FREE				

4.3.4 Design Your Own Template



Before delivering data to the EPD device, the user needs to design the template for the device to show the data on the screen. We have provided you with a drag & drop user interface to help you design your templates more easily. Click the **Template** icon in the left-side navigation bar and choose various tools to design templates, such as Label, Text, Image, Shape, Barcode and QRcode.



Label

.

Simply a text message

- Text Value comes from imported data, and you can choose what column of data needed to be shown.
- Image Full color images will automatically be re-sampled to red, black and white.
- Shape System supports rectangles, circles and triangle shapes.
- Barcode System supports code 39 barcodes.
- QRcode

4.3.5 Combing Template and Item Data

After importing data and making the template, we can combine them for regular data auto updates.

1) Select the desired Template

0	+ Template	MeetingRoom 🗸 🛛 🛛 🕬	* 8 * ~ Q 100% Q A 3	
		Car_EPD Car_EPD1		⊟Canvas
		ChipOrder1 EPD-053 White		Name
=		MeetingRoom		MeetingRoom
	l 🚺	Untile Template-1 da	te Whole Day Schedule 🧠 🖑 👘	Harm Group
		Untitle Template-2 WholeDaySchedule	Click Ne	MeetingRoot
	- -	LIIIC		Size
P				EPD-053R -
				Beckground color
0		ctatuc	annointer ext	White
1		Status	appointer	Grid Line
22	/ •			No
0		subject		Direction
02		Subject		Landscape
				Display orientation
8				Forward
				Schematic view
		>> nextTime	nextAppointemextExt	
				P Property
				(D) Property
				E Notes

2) Choose the Item Group.

		⊖ Canvas	
		Name	
momID date Whole Day Schedul		Meeting Room	
dus mole buy schedu	Click Ne	MeetinRoom	-
time		EPD-023	-
unic		MeetingRoom Meda Dav School vie	
		TestWholeDay	
status		test TestScTable	
SLALUS appointe	er ext	EPD_CAR EPD_053	
		053Test	
subject		Direction	
ubjeci		Landscape	
		Display orientation	
		Forward	
		Schematic view	
>> nextTime nextAppointe	einextExt		
		EPD-053	
		template	
			_
		⊕ Property	

3. Click the object to edit the content by selecting the value status.

etingRoom 🗸 🗘	🖺 🐵 😑 🕇 🧭 Q. 100% Q.		⊕ Canvas
			> Property
roomID	date Whole Day Schedule		Pestine
	a		Poston
time			Size
			Value
			status
subject			nextTime nextAppoin time roomID appointer status
>> nextTime	nextAppointemext	t	72 V Show condition
			O True O
			[status] ==
			🕀 Notes

Setup dynamic template.

For another special purpose template setting, you can decide whether an object shows or not depending on the specific item values. For example, word becomes red when temperatures are over 40 degrees. The next step demonstrates how to achieve this goal.

a. Make two objects which show conditions are opposite. Click one object.

• • tempt		
*		⊟ Canvas
_		Name
		EPD-053 White
<u>ه</u>		Hern Group
-		MeetingRoom
**		Size
P	Condition: Cool	EPD-053R - 600*448
	Condition. J Cool ,	Background color
B	So hoț	White
e -		Grid Line
		No
0		Direction
×		Landscape
		Display prioritation
8		Reverse
		Schematic view
		EPD-053 template O Property

Click the radio button option in the show condition.

0	+ Template EPD-003 White Y (#) ちゅ ミ ちゅ パ Q, 100% Q, A エ _ O 22 (日 日)			
*		⊞ Canva	5	
-		B Proper	ty	
-		>	X Axis	YAxis
		Position	207.695	114.992
æ1			Width	Height
-		Size	77	33
-	Condition: Cool a	Value		
۵	Solbot	Cool		
1	00 102	Noto Se	a	~
		Fant color		
0		Black		~
00		Background	nia	
		White		~
		Size	_	
		24	м в 🖿	2 2
		Show condition	21	_
		True C) False () Op	otion

A pop up dialog will appear. Fill in the conditions to show this object.

Note: if this item value is a number, you can use all operations. If this item value is a character, you only can use "==" or "!=").

EPD-053 White 💙 💓 🖻 👁 😑 🕇 👼 Q 100% Q A				
		🕀 Canva	5	
			ty	
			X.Axis	Y Axis
		Position	202.977	114.984
		Size	78	Height 33
Condition: Cool		Value		
COOL 2		Cool		
So hot		Font family		
		Noto Ser	nđ	~
		Forit color		
		Black		~
	Edit Show Condition	Background	color	
	Ealt Show Condition	White		~
	temp 🗸 K 🖌 40	24	и в 💼	± =
		Show condition	on	
	OK Cancel	O True C) False 🏾 😮 Oj	iton
		Notes		

Finish the show condition setting.



Click another object.



Click the radio button option in the show condition section.

0	+ Templane EPD-003 Winke ♥ (1) (1) (1) (1) (1 00% Q 1 A I → C) (1 A I →			
		⊕ Canvas	£	
		⊖ Proper	ty	
-			X Axis	Y Axis
		Position	201 Width	165 Height
# 3		Size	78	39
-	Condition: Cool	Value		
۵	So hot	So hot		
1		Noto Ser	e.	~
0		Font color		
		Red		~
0.		White		~
8		Size		
		24	в 🖿	2.2
		True C	False O O	ption
		⊕ Notes		

In the dialog, fill in the conditions to show this object.

Note: If this item value is number, you can use all operations. If this item value is character, you only can use "==" or "!=").



Finish the show condition setting.

emplate	EPD-053 White 🗸 🔄 🕲 👁 🗄 🗖 🤲 🍳 100% Q A 3				
		B	Canvas		
			Property		
	1	l l l l l l l l l l l l l l l l l l l		Axis	Y Axis
		Pos	ition 2	01	185
		Siz	1	Vidih z	Height
	Condition: Cool	New York Control of Co			
	Condition. , Cool ,	s	o hot		
	So hot	For	tamily		
		· · · · · · · · · · · · · · · · · · ·	loto Serif		~
		For	color		
			led		~
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		24	~	в 🗈 单	
		Sho	w condition	100	
			Frue O Fal	se 💿 Option	
		1	amp] > 40		
			lotes		

b. Put these two objects in the exact same position.

0	+ Template EFD-053 White 🗸 (+ 15) (+ 15) (+ 1) (+ 100% (+ 1) A 7)			
٠		⊕ Canvas		
		Propert	У	
-		 Position	X Axis 201	Y Axis 112
æ3		Size	Width 78	Height 39
-	Condition: So hot	Value So hot		
0		Font family		
*		Noto Seri	r	~
0		Font color		
-		Red		~
0;		Background of	HOP .	~
8		Size 24 Show condito	в 🖪	
		O True O	False 🛞 Op	tion
		[temp] > 4	D	

c. See the results by preview in the EPD controller page.



Dithering Function Introduction

Dithering function is developed and supported with ePaper Manager for the clarity of image. Image dithering consists of mapping the original grey image into a binary image. As our eyes perform a spatial integration, it is possible to achieve reasonable results by using a mapping strategy where the gray-intensity values are converted to density of black pixels.

The following will demo how to trigger the dithering function in ePaper Manager. Step1. Choose an image in the template and open the dithering function.





Step3. Then, users can close the dithering function to check the difference between dithering-ready and without dithering

• + herpose Car_EPO • • 5 •	B Canva	is rty	
	Position Size	X Axis 10 Width 579	Y Axis 9 Height 429
	ULU Ted 4345 None File Concert Paged Some - Not S Stanser	3-9e55-4e5d-a5 Defined == The No file chose any Differing OFF Position Far- ist	64-686cd1d50f1 v sen ad) v

Step4. Click preview again to see the results without dithering the image



4.3.6 EPD Controller for EPD Device Management



- Select correct account/group where your devices belong to
- Select Preview / Edit mode

Account	roo	t -		Group AEDEMO	- Status	All	Mode	Device -	
c /								Search	
Status 0	Power	RSSI	Mark	¢ Tag Name	item & Template	A	Action	Schedule	Update Time
ldle	100%	-30dBm	20	 EPD-0238 EPD-Tag-abc300 00000001-0000-00012-4b001dabc380 	Not-set 🖋 🖏 ChipOrder1	⊕ Ø Preview Refresh Ti	♥ 5 🗠 ransmit Cancel Monitor	简 0 List	2021/2/9 11:26:4
e Idle	100%	-29dBm		EPD-0238 EPD-Tag-682186 00000001-0000-0000-0012-460010502185	Not-set 💉 15 ChipOrdert	⊕ Ø Preview Refresh Tr	S ⊯ notice Sances	0 List	2021/2/9 11:20:4
Success	100%	-41dBm	27	 EPD-063R EPD-Tag-562805 00000001-0000-00012-460016562805 	Not-set 🖌 Si MeetingRoom_oni	⊕ Ø Preulew Refresh Ti	ବ ଓ 🗠 rankmit Cancel Monitor	0 List	2021/2/17 16.3.2
e Idle	100%	-27dBm	2	 EPD-0238 EPD-Tag-862706 00000001-0000-0012-460918582705 	Not-set 🖉 😚	th D Preview Refresh Tr	ອ ວ ໄຂ cancel Monitor	0 List	2021/2/9 11:26:4

There are two parts in the management: Properties & Action:

- 1) Properties: Users can read EPD device status as shown below.
 - EPD Device Status
 - Power
 - RSSI
 - Device Type, Name, Mac address
 - Binding Items & Template
 - Update Time
- 2) Action
 - ■2-1 Preview: users can preview the image on the EPD device.
 - ■2-2 Refresh: users may control EPD device refresh.
 - ■2-3 Transmit: users can deliver images to the EPD device.
 - 2-4 Cancel: users can cancel the transmit task.
 - 2-5 Carousel: users can setup carousel mode for the EPD device (this feature is only for EPD-662/660 model).
 - 2-6 Schedule: Users need to setup an EPD device data delivery schedule: Note: The timezone is determined by browser's UTC time.
 - The user needs to setup the EPD device data delivery schedule: Device Task: Select Transmit.

 The user needs to setup the EPD device image flash schedule Device Task: Select Re-fresh.

0	< Back						
•	Add EPD Schedule - 00000001-0000	-0000-0012-4600	16562185				
	Schedule Name						
<u>41</u>	Enable	ON					
φ	Device Task	Transmit 👻					
۵	Working Page	1 -				Set Tag Refresh	• Yes No
1	Timezone	(+08:00) Taipei -				Select EPD Type	EPD-0238
C	Period	Daily -				Select EPD Item	Not-set
Q ⁰ ₀	Set Time					Select EPD	ChipOrder1
8		^		^		Template	
		04		54	PM		
		~		*			
							Sav

- Select EPD Item: select a device receive the schedule.
- Set EPD Template: select the EPD Template from the list which you've already designed.
- Working Page: select which page in the EPD device.
- The user may setup the schedule date and time for the system.



1. Select binding data icon.

Account		root		Group AEDEN	~ on	Status		All	•	N	lode	Device ~
0												Searc
Status 🔅	Power	RSSI	Mark	Tag Name		Item & Template				Action		Schedu
•			 EPD-0238 EPD-Ten-abr/280 			Not-set	1	23	. 0		5 <u>1</u>	
lale	100%	-31dBm		00000001-0000-0000-0012-4b001dabe380		ChipOrder1			Preview Refr	esh Transmit	Cancel Monitor	0 List
•				EPD-023B EPD_7ap_562185		Not-set	1	23		-	5 2	m
icie	100%	-30dBm		00000001-0000-0000-0012-460016562185		ChipOrder1			Previour Refr	ish Transmit (Cancel Monitor	0 List
	-		194	S EPD-053R		Not-set	1	23			5 <u>w</u>	
Success	100%	-44dBm		00000001-0000-0000-0012-460018562805		MeetingRoom_ori			Preview Refr	ish Transmit (Canoel Monitor	0 List
•	-			SEP0-0238		m-EPD102(MeetingRoom)	1	\$3		• C • D 🗠		
Idle	10096	-26dBm	0.00	00000021-000-0000-0012-460018582705		ChigOrder1			Preview Refre	ish Transmit	Cancel Monitor	0 Lis

2. Select data to bind.

< Back											/ EPC
MeetingRoom	WholeDa	ySchedule TestWholeDay test T	estScTable EPD_CAR	EPD-053 053Test	EPD-023						
											Sea
date	ext		subject			nextTime	nextExt	nextAppointer	time	roomID	appointer
2020-12-31						14:00~14:30		[SW RD] Fabian Chung		EPD101	
2020-12-31						FREE				EPD103	
2020-12-31						FREE				EPD102	
2021/01/11	2857	ROSA客人種核							08:00~21:00	B2-21V1	LISA Y WANG
2021/01/11		672005;年终总结							15:00~17:00	B2-21V2	AISHA JIN
2021/01/11	2758	662384				16:00~17:30	2039	CRYSTAL WU	13:00~15:30	B2-21V3	ED HE
2021/01/11	2857	ROSA客人使用							08:00~20:00	B2-21M1	LISA Y WANG
2021/01/11	2999	NICO测试							08:00~20:00	B2-21M5	LOBBY2
2021/01/11		客戶連續辦公使用 2021/1/6-2021/7/5 還一3	2週五;聯繫方式:2862/1884	0018159					09:00~17:00	B2-21M8	AMANDA MENG
2021/01/11		RIFE ZHOU: POLY家产使用: 683598							08:00~20:00	B2-21D1	MICHAEL BAO

Note!

The user can import data and bind data to the EPD device in this web page.

We also offer a handset APP to bind device data to the EPD.

3. Binding Product item data with the APP.



- Install on Barcode scanner handset.
- Use a barcode scanner: PWS-472 to scan the EPD device Mac address barcode and target product barcode.

DeviceOn/ePaper Associate App

Download and install the EPM Barcode Scanner app on the PWS-472 device, a 5" Industrial-grade handheld terminal with 1D barcode scanner. You will see the

icon 🔛 in your desktop.

Please check your device link. Launch the app by clicking the icon.

Enter the server location, account, and password to sign into e-Paper Manager.

👱 🖙 🖞 📂 🏺 🛛 💎 🖹 🕯 4:01
ePaper Manager
Server
https://portal-esl-develop.wise-paas.con
Account
root
Password
••••
Remember Me
SIGN IN
$q^{1}w^{2}e^{3}r^{4}t^{5}y^{6}u^{7}i^{8}o^{9}p^{0}$
as dfghjkl
🛨 z x c v b n m 🛚
?123 @ English . >

Enter your device code and Item code information to perform bind action.

<u>∔</u> ψ ₩	💎 🖹 🖬 3:59
EPD barcode scann	er
Tag Code	
26	
Item Code	
596	
BIND	TRANSMIT

The PWS-472 device can scan a barcode quickly, which brings the device code and item code information into the fields. The **Bind success!** window will show up if successful.



Click the **Transmit** button to transmit the image to the device.

± ψ ♥	💎 🖹 🖬 3:59
EPD barcode scar	iner
Tag Code	
26	
Item Code	
596	
BIND	TRANSMIT

An information success window will show up.

<u>↓</u> ¥ ♥	💎 📉 🖪 3:55
EPD barcode scanner	
Tag Code	
Item Code	
Information	TRANSMIT
Transmit success !	
	ок

4. Binding template:



Account		root	•	Group	AEDEMO -	Status		All	•			Mode	
• •													
Status	Power	R S SI	Mark	Tag Name		item & Template					Action		
	-			• EPD-0238		Not-set	1	5		c			1
Idle	100%	-34dBm		00000001-0000-0000-0012-46001dab	c360	ChipOrder1			Preview	Refresh			Mc
•	-	Ŷ		• EPD-0238		Not-set	1	23		c			4
Idle	100%	-48dBm		00000001-0000-0000-0012-46001856	2186	ChipOrder1				Refrest			Mo
	-	٠		• EPD-053R		Not-set	1	53		c			-
Success	100%	-42dBm		00000001-0000-0000-0012-46001656	2805	MeetingRoom_ori				Refresh			Mo
	-			• EPD-023B		m-EPD102(MeetingRoom)	1	5		c	ø		1
Idle	100%	-35dBm	÷	EPU-13g-002700 00000001_0000_00012_45001858	2705	ChipOrder1			Preview	Refresh	Transmit		Mo

Account		root	•	Group	AEDEMO -	Status	All	•	-	Mode
0 0										
Status	Power	RSSI	Mark	Tag Name		Item & Template			Action	
•	-			• EPD-023B		Not-set	1 3		0 .	
Idle	100%	-35dBm	-	00000001-0000-0000-0012-4b001dabc360		ChipOrder1		Provinse F	efresh Transmit	
	-			• EPD-023B		Not-set	1 8		c +	
Idle	100%	-48dBm		00000001-0000-0000-0012-46001658218	5	ChipOrder1		Preview F	efresh Transmit	
	-			• EPD-053R EPD-Ten-562505		Choose template	е		o =	
Success	100%	-41dBm		00000001-0000-0000-0012-46001656280	5 ChipOrder1		•	Preview F	Jefresh Transmit	
	-			EPD-023B EPD-Tag-582705	search ter	nplate		٠	c 🗢	
idie	100%	-30dBm		00000001-0000-0000-0012-46001858270	5 Item Group	EPD-023		Preview F	lefresh Transmit	
					ChipOrd	ler1	1			
owing 1 to 4 of	+ rows				Untitle,T	emplate-1				



5. There are four actions for you to select.

- Preview: Current EPD device image preview
- Refresh: Re-fresh image
- Transmit: Transmit image
- Un-bind the EPD device and item

4.3.7 Final Association Between EPD Device, Target Product and Product Data



1) EPD device: Get EPD device's Mac address as an associate attribute, DeviceOn/ ePaper record and mapping to agent ID.

- 2) Target Item Product: Get a physical working ID Lot num as associate attribute.
- 3) The user needs to associate items above
- 4) Import RunCard Data needs to include field name: WorkID and data: Work001.



4.3.8 Smart Warehouse Pick to Light Scenario



1. EPD device in standby Mode, only shows stock status



2. When picking material request inputs, the ERP sends out an API to DeviceOn/ ePaper to trigger:

Action 1: Change to the image as below.



Action 2: Light up an LED to guide the picker to pick the material

Below is the comparison between traditional card and EPD.

- 3. When picker see the LED indicator on the drawer.
 - Action1: Picker take out the material according to the EPD's information Action2: Picker uses barcode scanner to scan the QR code Aciton3: ERP system will update the stock status and trigger the API to request EPD to update the information

AA PA NT\$10000	12/16/2018
1939000361	
A1234567890123456	3789012345678901234567890
R000 CSA2811	NXL Stock: 121

Action4: Printer print out the label directly.

4.4 Integrate EPD APIs Into Your System

We provide easy-to-use APIs to help you integrate into your own system. Below are samples for you. They are easy to integrate into your system with our restful APIs.



Vertical applications need to send APIs to DeviceOn/ePaper. Sample code below.

1. Our API in Javascript: setItemData to update data into DeviceOn/ePaper and DeviceOn/ePaper will help forward the data to EPD.

```
// update Item Data
function setItemData() {
    var url = HOST + '/esl/v1/items';
    var type = 'PUT';
    var data = {
        "items": [ JSON.parse($('#log').val()) ]
    };
    console.log(data);
    api(url, type, data, function(res){
        if(res && res.result)
            alert("Item Successfully Updated!");
        else
            alert("Ajax request error!");
    });
}
```

```
2.
   The user also can use: setSensorData to control EPD LED
           // set LED light
           function setSensorData() {
               var agentid = $('#agentid').val();
               var plugin = $('#plugin').val();
               var sensorId = $('#sensorId').val();
                       sensorValue
                                      =
                                            parseInt($('#sensor-
               var
Value').val());
               var url = HOST + '/esl/v1/devicectrl/data';
               var type = 'POST';
               var data = {agentId: agentid, plugin: plugin,
sensorIds: [{n: sensorId, v: sensorValue}]};
               api(url, type, data, function(res) {
                    console.log(JSON.stringify(res));
                    if(res && res.items && res.items.length > 0
&& (res.items[0].statusCode === 202 || res.items[0].statusCode
=== 200)){
                    alert("Update Sensor Data Command Sended!")
                  } else {
                    alert("Ajax request error!");
                  }
               });
           }
```

4.5 Control EPD Data Through DeviceOn/ePaper API

1. Upload EPD Data

- path: /esl/v1/items
- method: POST
- header: Basic Authorization
- body paramters:
- code: string
- name (group name): string
- content: JSON string
- body(example)
 { "items": [{ "code": "X001", "name": "John", "content: "{"name": "John","age":
 "18"}" }] }
- response(example)
 { "result": true }

2. Upload EPD Data for a specific item group

- path: /esl/v1/items/name/{name}
- method: POST
- header: Basic Authorization

- body paramters:
 - code: string
 - name (group name): string
 - content: JSON string
- body(example) { "items": [{ "code": "X001", "name": "John", "content: "{"name": "John", "age": "18"}" }] }
- response(example)
 { "result": true }

3. Update EPD Data

- path: /esl/v1/items
- method: PUT
- header: Basic Authorization
- body parameters:
 - code: string
 - name (group name): string
 - content: JSON string
- body(example) (Notes: you have to give all content in body even if you only need to edit partial content)
 { "items": [{ "code": "X001", "name": "John", "content": "{"name": "John", "age":
 "20"}" }] }
- response(example)
 { "result": true }

4. Delete EPD Data

- path: /esl/v1/items
- method: DELETE
- header: Basic Authorization
 - body parameters:
 - code: string
- body(example)
 { "items": [{ "code": "X001" }] }
- response(example)
 { "result": true }

5. Get EPD device AgentID

- path: /esl/v1/devices/agentid
- method: GET
- header: Basic Authorization
- url parameter: ?itemcode=[ITEM CODE]
- response(example)
 { "agentid": "0000001-0000-0000-0012-4b001557aa72" }

6. Get EPD device Status

- path: /esl/v1/devices/status
- method: GET
- header: Basic Authorization
- url parameter: ?agentid=[DEVICE AGENT ID]
- response(example) (Notes: all possible status are "sending command", "command timeout", "setting image", "set image okay", "set image error", "refreshing image", "refresh image okay", "refresh image error") { "status": "set image okey" }

7. Set EPD device Binding

- path: /esl/v1/devices/setBinding
- method: POST
- header: Basic Authorization
- body parameters:
 - agentid: string
 - templatename: string
 - body(example) (Notes: you must provide "agentid" or "did" in body, and for other parameters as follows, you only need to give at least one: "tid or templatename", "iid or itemcode", "mid")
 - { "agentid": "00000001-0000-0000-0012-4b001557a500", "templatename": "Abnormal-English" }
- response(example)
 - { "result": true }

8. Set EPD devices Binding

- path: /esl/v1/devices/setBindings
- method: POST
- header: Basic Authorization
- body parameters:
 - agentid: string
 - templatename: string
 - body(example) (Notes: you must provide "agentid" or "did" in body, and for other parameters as follows, you only need to give at least one: "tid or templatename", "iid or itemcode", "mid")

{ "bindings": [{ "did": 32, "itemcode": "Stop0002", "templatename": "Bus Stop Demo Init" }, { "agentid": "00000001-0000-0000-0012-4b001557a682", "itemcode": "Stop0002", }] }

- response(example)
 - { "result": true }

9. Transmit Image

- path: /esl/v1/devices/setImage
- method: POST
- header: Basic Authorization
- body parameters:
 - agentid: string
 - refresh(optional, default: 1): number [available values: 1: Refresh after transmit, 0: Just store image to ESL device memory]
 - page(optional, default: 0): number [available values: 0 ~ maxpagesize-1]
- body(example)

{ "agentid": "00000001-0000-0000-0012-4b001557aa72", "refresh": 1, "page": 0 }

response(example)

{ "status": "setting image" }

10. Transmit Image with Item Data

- path: /esl/v1/devices/setImageWithData
- method: POST
- header: Basic Authorization
- body parameters:
 - agentid: string
 - item: JSON

- code: string
- name (optional): string
- content (optional): JSON string
- refresh (optional, default: 1): number [available values: 1: Refresh after transmit, 0: Just store image to ESL device memory]
- page (optional, default: 0): number [available values: 0 ~ maxpagesize-1]
- body(example)

{ "agentid": "00000001-0000-0000-0012-4b001557aa72", "item": { "code": "Stop0001", "name": "Taipei 101", "content": "{\"Stop_Name\":\"Grand Hotel\", \"Route1 Name\":\"Test\"}" }, "refresh": 1, "page": 0 }

response(example)
{ "itemStatus": "update item okay", "status": "set image okay" }

11. Refresh Image

- path: /esl/v1/devices/refreshImage
- method: POST
- header: Basic Authorization
- body parameters:
 - agentid: string
 - page(optional, default: 0): number [available values: 0 ~ maxpagesize-1]
 - body(example)
 { "agentid": "00000001-0000-0000-0012-4b001557aa72", "page": 0 }
- response(example)
 "status": "refreshing image" }

12. Get Item

- path: /esl/v1/items/itemcode/{itemcode}
- method: GET
- header: Basic Authorization
- response(example)

{ "code": "device_00001", "iid": 243, "name": "RunCard", "content": "{"device_Number\":\"device_00001\",\"Template_ID\":\"RunCard\",\"WorkOrder\":\"YSI5001ZA\",\"PartNumber\":\"DLV8315-1J30000\",\"Qty\":\"20\",\"Station\":\"Assy\",\"NextStation\":\"BurnIn\",\"Arrival-Time\":\"5/22/18 9:11\",\"LeaveTime\":\"\",\"StayTime\":\"0\",\"Cautions\":\"\",\"Remark\":\"\"}" }

4.6 DeviceOn/ePaper Feature list

4.6.1 Component List

•	Device Overview	Last 24 Hours	🛄 Last Week	間 Effective Sc	hedule Task
				Device Group -AI-	
	Device Status	S RSSI Sinnal		Rattary Status	
# -	201	2.7.			
4 × 2 %	TOTAL 45	TOTAL 15	an Marine	TOTAL 15 100 0%	are and a second se
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64 × 22 © 8	E Renty II Day I	004.45 = 1 mpr. (c + 0.47 (m + 0.47) (m + 0.47 (m + 0.47) (m + 0.47)	n on official and the second s	TOTAL 15 10000 1000	Lee.
a ,≺ , , , , , , , , , , , , , , , , , ,	Image: Total 40 100 100 Image: Total 40 100 100 100	Image: State (State (7 min * 0 0 0	100% 100% 100% 10%	lar.

El Effective Schedule Ta

1. Device status: Provides EPD device status in system

Dashboard

- 2. Battery status: Shows battery status on EPD device.
- 3. EPD Device: Shows image update status.

•	Device Overview
	2021-02-24 - 2021-02-02
	LarganTestill: TAG TRANSMIT to Group LARGANTEST 💽 💽 🛃 😰
	🛇 023R5: TAG TRANSMIT to EPD-Tag EPD-Tag-G306522
0	🛇 AnotherTest30: TAG TRANSMIT to Group AnotherTest 🐚 🛃 🚺 🕼 🔛 🖬

- COREST TAG TRANSMIT IN EPO TAG EPO TAG STORE
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- Installation for Characteristic Contrage Contrageneers
 Installation for Characteristic Contrageneers
 Installation for Characteristic Contrageneers
 Installation for Characteristic Contrageneers

4. Schedule tasks:

Users can select current schedule in the system

EPD device search

Account	p	tec		Group Al	EDEMO -	Status	Al		Mode	Device -	
e 5										Search	
Status 🔅	Power 0	R\$\$I 0	Mark	0 Tag Name		Item & Template		Ac	tion	Schedule	Update Tim
e Idie	100%	-60dBm	÷	 EPD-0238 EPD-7ag-abc380 00000001-0000-0002-0012-46001dabc380 		Not-set ChipOrder1	/ 5	itte i D Preview Refresh Tra	Cancel Monitor	m 0 List	2021/2/2 11.8.44
e Idie	100%	• -3648m		EPD-0238 EPD-7ag-802188 00000001-0000-0000-0012-460018562188		Not-set ChipOrder1	0	en 10 Preview Refresh Tra	Cancel Monitor	0 List	2021/2/2 11.8.44
e Idle	100%	€848m		EPD-063R EPD-Tag-562805 00000001-0000-0000-0012-460018562805		Not-set MeetingRoom_ori	2	⊕ © Preview Refreck Tri	• 5 🗠	0 List	2021/2/2 11.8-44
	-			EPD-0238 EPD-Tep-482705		m-EPD102(MeetingRoom)	10	• S	- 0 K		2021/2/2

EPD Controller

Search criteria

Account/ Group/Connecting Status/ EPD Device Mode

Properties

Account		root		Group AEDEMO		Status		Al		Mo	ode	Device -	
0												Search	
Status 🔅	Power	RSSI 0	Mark	0 Tag Name	0	ltern & Template				Action		Schedule	Update Time
Idia	100%	Gid9n		© EPD-0238 EPD-Tag-abc080 00000001-0000-0012-4b001dabc380		Not-set ChipOrder1	1	5	e D Preview Retrest	Transmit C	o ⊮ ancel Monitor	0 List	2021/2/24 11.8.44
Idle	100%	-38dBm		 EPD-0238 EPD-Ta:-682185 00000001-0000-0012-460010502185 	-	Not-set ChipOrder1	1	8	@ Ø Proview Ratiest	e Transmit C	O ⊵≥ rotinoM laona	0 List	2021/2/2 11:8:44
• Idle	100%	-58dBm		 EPD-053R EPD-75g-662105 0000001-0000-0012-460018562805 	-	Not-set MeetingRoom_ori	1	8	⊕ ⊐ Preview Robert	Transmit C	o ⊯ ancel Monitor	0 List	2021/2/2 11.8.44
	-			● EPD-0238	m-1	PD102(MeetingRoom)	1	5	• 0		5 K	-	2021/2/2
Idle	100%	-31dBm		EPD-Tag-662705 00000001-0000-0000-0012-460018562705		ChipOrder1			Preview Refrest	Transmit C	ancel Monitor	0 List	11:8.44

Name / Panel type/ total page /Connecting status / Update Status

Schedule

Account		rost		Group	AEDEMO +	Status		AI	•	Mode		Device - Device - Group	
Status (Power	RSSI	Mark	0 Tag Name		item & Template			Actio	n		Schedule	Update Time
e Idle	100%	.€ •53dBm	-	 EPD-0238 EPD-Tag-abc380 00000001-0000-0000-0012-4b001dabc3 	300	Not-set ChipOrder1	1	0	⊕ D ♥ Preview Refresh Trans	D Cancel	ier Nonitor	0 List	2021/2/24 11.0.44
e Idle	100%			 EPD-0238 EPD-Tag-582185 00000001-0000-0000-0012-4600185621 	185	Not-set ChipOrder1	1	0	● Ø ♥ Preview Refresh Trans	D Cancel	ie. Monitor	m 0 List	2021/2/24 11:8:44
e Idle	100%	-47dBm		• EPD-053R EPD-7ag-862806		Not-set	1	0	e g e Presiev Releash Trans	D Cancel	ier Monitor	0 List	2021/2/24
Idle	100%	-30dBm		 EPD-0238 EPD-789-562705 		m-EPD102(MeetingRoom)	1	0	• 0 9	0	i≓ Mating		2021/2/24

Device mode

Step1: Choose the desired item to make the schedule

Account		1001		Group A	EDEMO -	Status		Al	(*)	Mode		Device -	
0												Search	
Status (Power	RSSI (Mark	t Tag Name		Item & Template				Action		Schedule	Update Time
	-	\$		EPD-0238		Not-set	1	5	• 0	·	2		2021/2/24
Idle	100%	-60dBm		00000001-0000-0000-0012-46001dabc380		ChipOrder1				Transmit Cance	Monitor	0 List	11.0.44
	-			• EPD-0238		Not-set	1	0	. J	- D	×		2021/2/24
Idle	100%	-38d8m		00000001-0000-0000-0012-460016562185		ChipOrder1				Transmit Cance	Monitor	0 List	11.8.44
	-			• EPD-053R		Not-set	1	0		÷ 5	×		2021/2/24
Idie	100%	-58d8m		00000001-0000-0000-0012-460018562805		MeetingRoom_ori				Transmit Cance	I Monitor	0 List	11.8.44
	-			• EPD-0238		m-EPD102(MeetingRoom)	1	0	• 5	- D	×		2021/2/24
Idle	100%	-31dBm	~	EPD-1ap-002/05 00000001-0000-0012-450018552705		ChipOrder1			Preview Retresh	Transmit Cance	Monitor	0 List	11.8.44

Step2: Click the "add" icon to for schedule making

0	< Back			/ EPO Controller	/ Schedule
	EPD Schedule Management - 00000001-0000-0000-0012-4b001dabc360	1			
	+ 0			Search	
9E3	Schedule Name	Action	Mode	Next Execution Time	
		No	matching records found		
4					
/					
c					
0					
8					

Action

Step3: The users can setup Transmit/Refresh as the scheduling task daily/ weekly/monthly/yearly, and choose EPD Type, Item and Template of schedule



Step4: After the save is clicked, the arranged schedule will be added in the list

0	< Bac	(
۲	🛗 EPI	9 Schedule Management - 00000001-0000-0000-0012-4b001dabc360			
		R			
	-				
41		Schedule Name	Action	Mode	
Ģ		Setupschedule	tag transmit	daily	2021/2/25 2:58 PM(+0800)
۵	Showing	1 to 1 of 1 rows			
*					

Group Mode Step1: Choose the desired group to make the schedule

0	Sept Co	ontrolling I	Management			
٠	Account		root +		Mode	Group -
-						
27 F	Schedule	EPD Tags		Schedule Name		
	🛗 Schedule	Tag List	AEDEMO			
•	🛗 Schedule	Tag List	LARGANTEST			
/	🛗 Schedule	Tag List	AnotherTest			
c	🛗 Schedule	Tag List	demo			
og	1 Schedule	Tag List	ToCustomer			
8	Showing 1 to 5 of 6	rows 5 - r	uscussomer bws.per.page			

Step2: Click the "add" icon for schedule creation

0	< Bac	k			
۲	🛗 EPI	D Schedule Management - AEDEMO			
-	Ľ				
<u>ه</u>		Schedule Name	Action	Mode	
Ţ		S epd053Rtest37	tag transmit	hourly	2021/2/2 9:37 AM(+0800)
•		S epd023Btest39	tag transmit	hourly	2021/2/2 9:39 AM(+0800)
с С		Sepd053Rtest40	tag transmit	hourly	2021/2/2 9:40 AM(+0800)
08		C epd023Btest42	tag transmit	hourly	2021/2/2 9:42 AM(+0800)
8		S epd053Rtest43	tag transmit	hourly	2021/2/2 9:43 AM(+0800)

Action

Step3: Users can setup Transmit/Refresh as the scheduling task daily/weekly/ monthly/yearly, and choose EPD type, item and template of the schedule.





0	< Bac	k			
٠	m EPI	D Schedule Management - AEDEMO			
=	-				
58	+	8			
1		Schedule Name v	Action	Mode	Next Execution Ti
		Scheduletesting	tag transmit	dally	2021/2/24 3:23 PM(+0800)
۵		C epd053Rtesi7	tag transmit	hourly	2021/2/2 10:07 AM(+0800)
× 0		C epd053Rtest58	tag transmit	hourly	2021/2/2 9.58 AM(+0800)
00		C epd053Rtest55	tag transmit	hourly	2021/2/2 9:55 AM(+0800)
8		C epd053Rtest52	tag transmit	hourly	2021/2/2 9:52 AM(+0800)
		C epd053Rtes149	tag transmit	hourly	2021/2/2 9:49 AM(+0800)
		C epd053Rtest46	tag transmit	hourly	2021/2/2 9:46 AM(+0800)

Bind Item

	EPD C	ontrolling	Manageme	nt						
	Account		root		Group	AEDEMO ~	Status		All	-
0	0									
	Status 🕴	Power	e RSSI e	Mark	Tag Name		Item & Template			
	•	-	*		EPD-0238		m-EPD103(MeetingRoom)	1	23	æ
	Idle	100%	-40dBm		00000001-0000-0000-0012-4b001dabc360		ChipOrder1			Preview
		-			• EPD-023B		m-EPD103(MeetingRoom)	1	5	۲
	Idle	100%	-33dBm	-	00000001-0000-0000-0012-4b0016562185	5	ChipOrder1			Preview
		-			SEPD-023B		m-EPD103(MeetingRoom)	1	55	æ
	Idle	100%	-33dBm	-	EPD-Tag-562705 00000001-0000-0000-0012-4b0016562705	5	ChipOrder1			Preview

Available Target Product and Data

MeetingRoom	WholeDa	/Schedule Test/WholeDay test TestScTable EPD_CAR EPD-053 053Test	EPD-023	ChipOrder			
date) ext	subject	¢	nextTime) nextExt (nextAppointer	† time
2020-12-31				14:00~14:30		[SW RD] Fabian Chung	
2020-12-31				FREE			
2020-12-31				FREE			
2021/01/11	2857	ROSA客人植枝					08:00~21
2021/01/11		672005;年终总通					15:00~17
2021/01/11	2756	662864		16:00~17:30	2039	CRYSTAL WU	13:00~15
2021/01/11	2857	ROSA客人使用					08:00~20
2021/01/11	2999	NICO则试					08:00~20
2021/01/11		客戶連續變公使用 2021/1/5-2021/7/5 週一至週五;聯繫方式:2862/18840018159					09:00~17
		DIEE 74011 · DOLY支白信用 · ceptor					02-00-70

The user can manual bind/unbind ITEM DATA to the EPD device

1. Click the "pen" image icon



2. Select the bind icon

3. The system will pop-up another page for available target product and data. Bind Template



The user can manually bind TEMPLATE to EPD device

Sept 0	Controlling	Manageme	nt									
Account		root		Group	AEDEMO	Status		All	-		Mode	
0 0												
Status	Power	(RSSI (Mark	Tag Name		Item & Template				Action		
	-			EPD-0238		m-EPD103(MeetingRoom)	1	5				2
Idle	100%	-41dBm		00000001-0000-0000-0012-4b001dab	:360	ChipOrder1			Preview Refresh	Transmit		Mon
	-			• EPD-023B		m-EPD103(MeetingRoom)	1	25		٠		2
Idle	100%	-32dBm		00000001-0000-0000-0012-46001656	2185	ChipOrder1			Preview Refresh	Transmit		Moni
	-			SEPD-0238		m-EPD103(MeetingRoom)	1	5				1.0
Idle	100%	-33dBm		EPD-Tag-562705 00000001.0000.00012.450016563	2765	ChipOrder1			Preview Refresh	Transmit		Moni

The user can preview the EPD Device image.

Transmit

secs.

Account		root	-	Group	AEDEMO	-	Status		All	-		Mode	
0 0													
Status (Power	RSSI	Mark	Tag Name			Item & Template				Action		
	-			SEPD-0238			m-EPD103(MeetingRoom)	1	5			c	2
Idle	100%	-41dBm		00000001-0000-0000-0012-4b001dabc360	e.		ChipOrder1			Preview Ref	esh Transmit	Cancel	Monitor
	-			SEPD-0238			m-EPD103(MeetingRoom)	1	25			c	Ŀ.
Idle	100%	-32dBm		EPD-18g-562185 00000001-0000-0000-0012-460016562185	5		ChipOrder1			Preview Ref	esh Transmit	Cancel	Monitor
	-			SEPD-0238			m-EPD103(MeetingRoom)	1	5				12
Idle	100%	-33dBm		EPD-Tag-562705	2		ChinOrder1			Preview Ref	esh Transmit	Cancel	Monitor

- 1. The user can re-fresh the image on the EPD device
- 2. The user can transmit images to the EPD device

3. If the user clicks "transmit" or "re-fresh" for the device, then the system keeps busy, not responding from the device side. The user can click "reset" to cancel the execution.
4. LED blinking values: maximum is 86400, minimum is 0, duration cycle 1.5

Action

Transmit Image Options

1		
Refresh	After Transmit?	ON
	With Blinkin	g LED?
	W/O LED	-
This acti especial	on may leads to time ly when server is bus try it again after batc	out if the server is bu y on batch jobs. Plea h jobs finished.
Import ITEM Data

								-		
	MeetingRoom Who	eDaySchedule	TestWholeDay test	TestScTable	EPD_CAR E	EP		(1		
=										
	2 🕀 🕪									_
ăΞ.	date	ext	subject		nextTime	Ru	iles to	or Upload	ding Iter	n Data
-	2020-12-31			14:	00~14:30	Now w	e suppor	t three file type: nat (Example	s: JSON, Exce SON file must	el, and CSV.
7	2020-12-31			FR	E	e	ncoded)	nur (Estampio, o	o ort no mao	
•	2020-12-31			FR	E		{ "iten	s": [
1	2021/01/11	2857	ROSA客人物核				{	"code": "X001"		
0	2021/01/11		672005:年终总结					"name": "Group "location": "B	Name", A101",	
OS	Showing 1 to 5 of 18 row	s 5 - rows pe	r page				}	<pre>"content": {"i ,</pre>	d": "X001", "loc	ation": "BA10
8							1	"code": "X002" "name": "Group	, Name",	
								"location": "B "content": {"i	A102", d": "X002", "loc	ation": "BA10
							1			
							}			
							< []			+
						• E	xcel/CSV	/ format (Examp	ole, CSV file m	ust be UTF-
						8	The first	i) column will refe	r to as the uni	que id for
						it	em data ((itemcode), and	the second co cation mark (it	olumn will
						re	eler to as	a tay actice to		emlocation)
						re	id	location	name	emlocation) age
						re	id X001	location BA101	name John	emlocation) age 18

Supports CSV, EXCEL , JASON Format

Add new data into current item

		MastingDoors	Whole D	au Cabadul-	TeetMaleDer	toot	TootCoT-L	EDD CAD	EDD 052	
		MeetingRoom	vvnoleD	aySchedule	lestvinoleDay	test	TestSc lab	e EPD_CAR	EPD-053	
Data	⊞	_								
	-	1 E 🗭								
	_	date		ext		subject		nextTime		
		2020-12-31						14:00~14:30		
	-	2020-12-31						FREE		
	6	2020-12-31						FREE		
		2021/01/11		2857	ROSA客人	香核				
	<i>y</i>	2021/01/11		2001	67200E - G	-10 10 H (±				
	0	2021/01/11			072003, 4	-94 /0/92				
	© Wor	Showing 1 to 5 of	f 16 rows	5 . rows p	per page					
	¢: ∎ Wor	Showing 1 to 5 of king Grou	f 16 rows p anagemer	5 rows p	ber page					
	¢: ⊌ Wor	Showing 1 to 5 of king Group Item Data Ma MeetingRoom WholeD	f 16 rows p anagemer	5 rows p	ber page test TestScTa	ble EPD_CAR	EPD-053 05	3Test EPD-023	ChipOrder + Add	
	¢: ₩or	Showing 1 to 5 of king Group I tem Data Ma MeetingRoom WholeD	f 16 rows P anagemer	5 a rows p	ber page test TestScTe	ble EPD_CAR	EPD-053 05	3Test EPD-023	ChipOrder + Add	
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	¢: Wor	Showing 1 to 5 of king Group Item Data Ma MeetingRoom WholeD tate 2020-12-31 2020-12-31	p anagemer laySchedule ext	5 rows p	test TextScTa	ble EPD_CAR nextTime 14.00-14.30 FREE	EPD-053 05	3Test EPD-023 Ext (SW RD) F	ChipOrder + Add nextAppointer ablan Chung	
	v: Wor • • •	Showing 1 to 5 of king Group Item Data Ma MeetingRoom WholeD tate 2020-12-31 2020-12-31 2020-12-31	p anagemen wySchedule ext	5 a rows p	test TextScTa	ble EPD_CAR nextTime 14:00-14:30 FREE FREE	EPD-053 05	3Test EPD-023 Ext [SW RD] F	ChipOrder + Add nextAppointer abian Chung	
	©° Wor ♥ ■ ■ ₽ ₽	Showing 1 to 5 of king Group Item Data Ma MeetingRoom WholeD date 2020-12-31 2020-12-31 2020-12-31 2020-12-31 2020-12-31 2021-01/11	p anagemer laySchedule ext 2857	5 a rows p	test TestScTa subject @	ble EPD_CAR nextTime 14.00-14.30 FREE FREE	EPD-053 05	3Test EPD-023 Ext [SW RD] F	ChipOrder + Add nextAppointer abian Chung	
	C Wor C C C C C	Showing 1 to 5 of king Group Item Data Ma MeetingRoom WholeD date 2020-12-31 2020-12	p anagemen laySchedule ext 2857	5 a rows p	test TestScTa subject @	ble EPD_CAR nextTime 14.00-14.30 FREE FREE	EPD-053 05	3Test EPD-023 Ext [SW R0] F	ChipOrder + Add nextAppointer abian Chung	
	C Wor C C C C C C C C C C C C C C C C C C C	Showing 1 to 5 of king Group Item Data Ma MeetingRoom WholeD Cate 2020-12-31 2020-12	p anagemen aySchedule ext 2857 5 + rows pe	ちょ rows p nt TestWholeDay ROSAを人間様 672005;単純) er page	test TestScTa subject	ble EPD_CAR nextTime 14.00-14.30 FREE FREE	EPD-053 05	3Test EPD-023 Ext [SW RD] F	ChipOrder + Add nextAppointer ablan Chung	
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	C Wor C C C C C C C C C C C C C C C C C C C	Showing 1 to 5 of king Group Eltern Data Ma MeetingRoom WholeD Cate 2020-12-31 2020-	p anagemen wySchedule ext 2857 5 + rows pe	ち、 rows p nt TestWholeDay ROSA審人階級 672005 : 半終) ar page	test TestSCTa subject	ble EPD_CAR nextTime 14:00-14:30 FREE FREE	EPD-053 05	3Test EPD-023 Ext [SW RD] F	ChipOrder +Add nextAppointer ablan Chung group nam	e
	C C C C C C C C C C C C C C C C C C C	Showing 1 to 5 of king Group Eltern Data Ma MeetingRoom WholeD Caste 2020-12-31 2020	p anagemen wySchedule ext 5+ rows pe	ちょ rows p	test TeslSCTa subject	ble EPD_CAR nextTime 14:00-14:30 FREE FREE	EPD-053 05	3Test EPD-023 Ext [SW RD] F	ChipOrder + Add nextAppointer abian Chung group nam	e

The user can perform a different working group in the same system.
 The user can add a new group by clicking the Add icon.

Device search including EPD device, router and hub.

-							
0	Device Manage	ment					
۲	Account	root	•	Group	AnotherTest -	Status	All -
	+ / 0 1						
	Device Name		Panel Type	*		Messages	
Ψ.	EPD-Tag-e6ea4d		EPD-053R	Normal			
۵	EPD-Tag-e6eabe		EPD-053R	Normal			
*	EPD-Tag-e6eaf5		EPD-053R	Normal			
0;	EPD-Tag-e6eab6		EPD-053R	Normal			

Search criteria

Account/ Group/Connecting Status/ EPD Device Mode

Device List

Group	AEDEMO -	Status	All	•	Mode	Device -			
						Search			
		Messages				Channel		Device Name	
							20		1
							20	Monitoring Get/Set Data	
							20	Collect	
							20	Panel Type	e
						•	20.	Messages Nessages	

Remote control device:

1. Default column is Name and status message.

2. The user can click the icon at the right to select more fields: monitoring, Get/ Set Data, and more.

Import from JSON file		🖯 Canvas
Copy from current one		Name
Canada a sera sea		Car_UPO1
	- SMT AGV送料 📿 車	horn Group
		EPO_CAR 🗸
		Size
	線別: ///	EPD-053R - 600*448
		Background color
		White 🗸
	B/I: Process I	Grid Live
		· · · · · · · · · · · · · · · · · · ·
	MO: UnitNo	Direction
	Not del Note del	Landscape V
	送料卷數; Station_DESC /	Ensand
		Schemals view
		U
		EPD-053
		template
		⊕ Property
		(F) Notes

The user can create a new template, import from JSON file, or copy from current one

Template



Provides image tool

Save / Preview / Delete / Previous Movement or Next Movement / Zoomin or Zoomout / Dynamic or Static Text / Shape / Image / Barcode / QRcode

The user may save the template and then go to EPD controller to bind the template with the EPD device.



Template name: users can enter the template name here Item group: users can select the created Item Group EPD size: users can choose 2.9", 5.6", 13.2", or 32" Background color: White/Black/Red Grid line: No/Yes Direction: Portrait/Landscape Display orientation: Forward/Reverse Schematic view

Template

W LI D O	ond onling in							
Account	r	oot	•	Group	AEDEMO -	Status		All
ت ک								
Status	Power	RSSI	Mark 🕴	Tag Name		Item & Template		
	-	÷		• EPD-023B		m-EPD101(MeetingRoom)	1	5
Idle	100%	-42dBm		EPD-Tag-abc360 00000001-0000-0000-0012-4b001dabc360		ChipOrder1		
				♥ EPD-023B		m-EPD103(MeetingRoom)	1	2
Idle	100%	-44dBm		EPD-Tag-562185 00000001-0000-0000-0012-460016562185		ChipOrder1		
• Idle	100%	€ •35dBm		 EPD-023B EPD-Tag-562705 00000001-0000-0000-0012-460016562705 		Choose template		
Showing 1 to 5 of u	ndefined rows	5 . rows per p	page		ChipOrder1	alata		-
					Item Group	EPD.023		
					ChipOrde	r1		/
					Untitle Te Untitle Te	mplate-1 mplate-2		
	Account	Account r Account r Status Power Ide 100% Ide 100% Ide 100% Status Showing 1 to 5 of undefined rows	Account root Status Power RSS Idle 100% -42dBm Idle 100% -4dBm Idle 100% -35dBm Showing 1 to 5 of undefined rows 5 - rows per p	Account root - Status Power RSSI Mark Idle 100% -42dBm - Idle 100% -44dBm - Idle 100% -35dBm - Showing 1 to 5 of undefined rows 5 - rows per page	Account root Group Status Power RSSI Mark Tag Name Etb 100% 42dBm EPD-1238 EPD-1238 Ide 100% 42dBm EPD-1238 EPD-0238 Ide 100% 44dBm EPD-1238 EPD-0238 Ide 100% 44dBm EPD-12352185 0000000-000-0012-4b0016562185 Ide 100% -35dBm EPD-0238 EPD-0238 EPD-123552185 Stotion EPD-0238 EPD-0238 EPD-0238 EPD-0238 EPD-0238 Ide 100% -5dBm EPD-0238 EPD-0238 EPD-0238 EPD-12362705 EPD-0238 EPD-02	Account root Group AEDEMO Status Power RSSI Mark Tag Name Ide 100% -42dBm EPD-0238 EPD-0238 EPD-0238 Ide 100% -44dBm EPD-0238 EPD-0238 EPD-0238 Shoving 1 to 5 of undefined rows 5- rows per page EPD-0238 EPD-0238	Account rot Group AEDEMO Status Status Power RSSI Mark Teg Name Item & Template Ide 100% 428Bm EPD-0238 mtEPD103(MeetingRoom) Group mtEPD103(MeetingRoom) Ide 100% 444Bm EPD-0238 mtEPD103(MeetingRoom) GrbpOrder1 Ide 100% 444Bm EPD-0238 ChipOrder1 ChipOrder1 Ide 100% 356Bm EPD-0238 ChipOrder1 EPD-0238 Showing 1 to 5 of undefined rows 5 - rows per page EPD-0238 ChipOrder1 EPD-0238 Unitike Template-1 Unitike Template-1 Unitike Template-1 Unitike Template-1 Unitike Template-1	Account rot Group AEDEMO Status Status Power RSSI Mark Tag Name Item & Template Ide 100% -42dBm EPD-123-8620 0000001-0000-0012-4b001dabc360 OhipOrder1 Ide 100% -44dBm EPD-0238 m-EPD103(MeetingRoom) Item PD103(MeetingRoom) Ide 100% -44dBm EPD-0238 ChipOrder1 Ide 100% -44dBm EPD-0238 ChipOrder1 Ide 100% -36dbm EPD-0238 ChipOrder1 Showing 1 to 5 of undefined rows 5 - rows per page EPD-0238 ChipOrder1

1.EPD controller should setup the binding template.



- 1. Select on component
- 2. Right side shows the component properties.

3. Select the field "Value" and drop down menu shows data field from item data.

Note:

The upgrade action currently is valid for Router 3220, 3240, 3270 only and cannot upgrade single device individually.

Upgrade: This step will proceed Download and Deploy, which describe the following:

Download: This step will download the specific version of package file from FTP server. Before proceeding this step, you need to upload the package file in the upload page.

Deploy: This step will deploy the file and upgrade the EPD devices firmware to the specific version.



OTA

Select upgrade device

localStorage(•	1 Upload	Remove				
0	No.	Туре	Version	OS	Arch	Storage
	1	EPD023R	1.0.2.0	n/a	n/a	localStorage
D	2	1840	1.0.4.0	n/a	n/a	localStorage
No.: Type: Version: OS: Arch: Optimized Storage: Name: Upload Time	2 18- 1.0 n/a n/a fals loc 18- 20:	40 .4.0 se alStorage 40-v1.0.4.0-a94ae72e4c6dd09 21-02-22 17:24:58.545)f4b513faf31ebf90f.zip			
0	3	EPD053R	1.0.5.0	n/a	n/a	localStorage
0	4	EPD053R	1.0.4.0	n/a	n/a	localStorage
	6	1940	1020	p/a	pla	localStorage

File preparation for the upgrade

Storage

ł	Storage Ma	inagement					
+						Search	
		Storage Name 🗢	Туре	Security	Max Connections		Operatio
*	localStorage		FTP	NONE	Ξ 5 Q 30		× ×
	Storage Name	localStorage	Туре	FTP			
	Security	NONE	Max Co	nnections = 5	₽ 30		
	Domain	172.22.20.81	Port	21			
	Account Name	user1	Descrip	tion NIA			
					To	tal 1 5/pape ·	3 1

OTA

Storage Name	Type	Security	Max Connections	Operation
< lecalStorage	🖋 Edit FTP Storag	10	≅ : Q : 0	
Storage Name IncadStorage Security NCNE Donalan 172.22.20.31 Account Name user1	* Storage Name 100 * Security © N	AStorage		
	* Domain 17	2.22.20.81	Tetat 1	Sipage
	Port 21			
	* Account Name use	el		

FTP & File path setting

Role	Role								
0	Role Management								
٠									
-	,	łame		Description					
4 1	super admin		Super Administrator						
	admin		System Administrator						
۵	device admin		Device Administrator						
1									

Definition as below Super Admin: Super Administrator Admin: System Administrator Device Admin: Device Administrator

Account & Group



0	Account Manager	ment			
۲	Role	super admin 👻			
	1				
40	Nam	te d	Email	Phone	
Ţ	root		rool@advantech.com.tw	Not set	root
۵	显示第1到第1条记录,总共1	条记录			
*					
c					
00					

0 *	The Device Group Detailed Information								
	+ 🗾 Step1 Group Name	Step2 Parent Group	Child Groups	· Description · F					
÷	AEDEMO	Not Set	Not Set	Not Set					
۵	LARGANTEST	Not Set	Not Set	Not Set					
1	Another/Test	Not Set	Not Set	Not Set					
0	demo	Not Set	Not Set	Not Set					
#	TeCustomer	Not Set	Not Set	Not Set					
	显示第1刻第5条记录: 尼共6条记录 篇四显示 5-	*2R		3 1 2 >					
Se	ets the device	into group.							

Email Service

1.Click System button under the setting list

0	🖋 System Management			
•	Setting			
	Email Service Setting Set up Email service for retreiving event n no time Send Email for Texing &	Activate Server Advise his product with a lorence key to continue w services Click Here 🗲	Server Configuration Every configuration and data can be veen and official here Citica Hore of	Rule Setting The rule for device abnormal warning can be setted here Click Here of
/	0 AL - AL - 15 H			Device Operation System
0	Setting		Event Description	
8	E Role Device add successfully			
	Account Device add failed			
	Device Group Device upgrade failed A System			
	i Event Device download upgrade	failed		
	Device connected			
	Device disconnect			
	Device lost connected			

2.Click Email Service Setting, and fill in the following form.

	0	🖋 System Management						
	*	Setting						
		Email Service Setting Set up Email service for retreiving event notifications in	Activate Server	Email Service Setti	ng			
		no time Send Email for Testino of	Service Click H	Email Server				
	•			mailapp.advantech.com				
	1			25	SSL -			
Setting	0	GAIL - ALL - G H	E	Email Account				
	Q ₀	Severity Severity		advantech\homer.wang				
	-	Device add successfully	E	Email Password				
		Device add failed						
		Error Device upgrade failed	s	Sender Email				
		Device download upgrade failed		homer.wang@advantech.com.tw				
		Information Davide connected	E	Email Subject				
				EPD test				
		Device disconnect						
		Device lost connected		OK Cancel				
		A CONTRACTOR OF A CONTRACTOR O						

3.Success.



Chapter 4 EPD-230, EPD-232 in DeviceOn/ePaper

4.Add email account list for this service. Click Account button under the Setting List.

Role	aomin 👻		
	super admin		
+ / 🗄	admin 🖌		
	Name	Email	Phone
		没有找	机匹配的记录

5.Add an admin account. Click Save button. An email will be sent to this local user when an event occurs.



Add EPD connection number license.

	0	i Event Management																
	۲	Account	root						Grou	р				AED	емо			
		O All - 🛗	2021-02-25 17:04 - 2	021-02-26	17:04		4											
			Today	(m) (m)	2/25/2	2021		_		(02/2	6/2021					Туре	Severity
		2/26/2021, 3:23:00	Yesterday	O	5	v	04	PM	¥	0	(5 🗸): (04	¥	PN •	~	Device	Error
		2/26/2021, 3:23:00	Last 7 Days	<		Fe	b 202	Ē.				N	Mar 20	21		>	Device	Error
	•	2/26/2021, 3:23:00	Last 30 Days	Su	Mo	Tu	We	Th F	r Sa	Su	M	o Tu	We	Th	Fr	Sa	Device	Error
Settina	*	2/26/2021, 2:58:59	This Month	31	1	2	3	4 4	5 6	28	1	2	3	4	5	6	Device	Error
e e un ig	c	2/26/2021, 1:28:54	Last Month	7	8	9	10	11 1	2 13	7	8	9	10	11	12	13	Device	Information
	02	2/26/2021, 1:28:53	Gustom Range	21	22	23	24	25 2	9 20 6 27	21	2	2 23	24	25	26	20	Operation	Information
	***	2/26/2021, 1:28:53	Apply Cancel	28	1	2	3	4 :	5 6	28	2	9 30	31	1	2	3	Device	Information
	8	2/26/2021, 1:28:53		7	8	9	10	11 1	2 13	4	-	6	7	8	9	10	Operation	Information
		2/25/2021, 6:05:26 PM							EPD-Router-483078								Device	Information
		2/25/2021, 6:05:25 F	м				E	PD-R	outer-4	3078							Device	Information
		2/25/2021, 6:05:25 F	6:05:25 PM							EPD-Router-483078							Operation	Information
		2/25/2021, 6:05:24 F	м				E	PD-R	outer-4	3078							Operation	Information









www.advantech.com

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