

Wireless ePaper Solutions

Accelerate ePaper Implementation with DeviceOn/ePaper Centralized Management

- ✓ ePaper Solution Suites
- ✓ DeviceOn/ePaper Software
- ✓ AIoT Applications
 - Smart Factory
 - Smart Hospital
 - Smart Building
 - Smart City



DeviceOn/ePaper












Smart Factory

Smart Building

Smart Hospital

Smart City

 <p>Inventory Management</p>	 <p>Production Cart</p>	 <p>Instruction Signage</p>	 <p>Scheduling Card</p>	 <p>Clinic Information Board</p>	 <p>Bedside Card</p>	 <p>Bus Stop</p>	 <p>Smart Lighting</p>
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ADVANTECH

Enabling an Intelligent Planet

www.advantech.com

ePaper Solution Suites for AIoT Applications

Advantech's Solution Suites helps system integrators develop AIoT applications quickly. Users can decide what information to display on ePaper devices with models aimed at specific application scenarios. DeviceOn/ePaper software remotely controls Advantech's ePaper solution suites with delivering up-to-date information, and supports interaction between server and ePaper devices.

ePaper Solution Suites by AIoT Applications

Smart Factory Solution Suite

- 2.9" In-house logistics
- 5.6" Production cart



DeviceOn/ePaper

Meeting Room Solution Suite

- 5.6 Instruction signage



DeviceOn/ePaper

Smart Wardroom Solution Suite

- 13.3" Bedside card
- 2.9" ID card



DeviceOn/ePaper

Public Signage Solution Suite

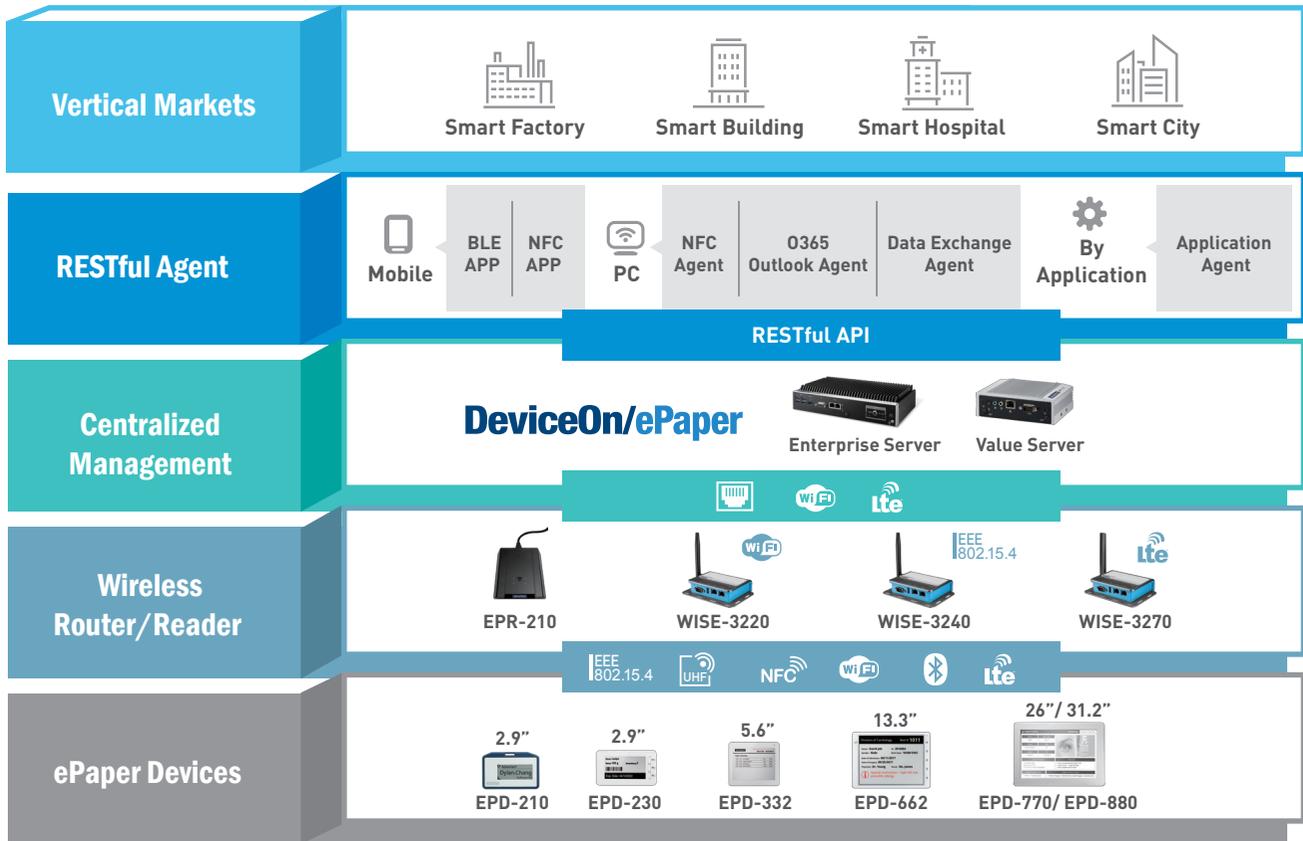
- 26" Street lighting
- 31.2" Bus stop



DeviceOn/ePaper

Advantech Wireless ePaper Solutions

Advantech provides hardware and software integrated wireless ePaper display solutions: wireless ePaper modules, routers, gateways, and DeviceOn/ePaper software to accelerate the implementation in a wide range of applications such as electronic shelf labelling, digital signs in smart warehouses, industrial equipment, and public spaces. Advantech's DeviceOn/ePaper enables easy local/remote system management using MQTT protocols, which enables system integrators and developers to focus on AIoT application development.



Product features



Ultra-low Power

Efficient power-saving design



Fast Transmission

Update 10,000 ePaper devices in one hour



2-way Communication

End devices can report data accuracy, battery levels, and abnormal statuses

DeviceOn/ePaper

Centralized ePaper Manager

Visualized user interface for content management and system maintenance



OTA Upgrade

Regular system patches and updates



AES-128 Security

AES-128 encryption and data compression



Device Association

Easy association between ePaper devices and end-device applications



Network Self-Configuration

Auto-organized network groups with self-reported status

ePaper AIoT Applications



Smart Factory

- Picking and inventory management
- RFID/Reader solution integration
- Batteryless NFC EPD box labels improve logistics operations

Benefits

- Fast data transmission
- Accurate stock level/expiry date information
- Batteryless NFC solution eases maintenance



IEEE 802.15.4 NFC UHF

EPD-210, EPD-230, and EPD-232 (2.9")

Computer assisted picking (CAP) systems connect up to three pickers to ePaper devices, augmenting retail, warehouse, and pharmacy applications. These devices leverage LEDs, alarms, and cancel functions to expedite order-picking processes. Use ePaper devices to monitor product stock and expiration dates.

- Supports IEEE 802.15.4 / 2.4 G networks
- Low power consumption for up to 5 years
- Multiple I/O control, and OTA supports



Smart Building

- Meeting room management
- Equipment monitoring and management
- Reception counter cards

Benefits

- Accurate equipment status information
- Agent ready for Outlook Exchange & Microsoft O365
- Cost-effective long lifetime solution



IEEE 802.15.4

EPD-332 (5.65")

Aimed at equipment, meeting rooms, and factory production management — these big screens convey detailed information with ultra-low power consumption in standby mode. End users can survey information without using extra handsets and equipment.

- Arm Cortex-M3 core processor
- Supports IEEE 802.15.4 / 2.4 G networks
- Up to 3 years low power consumption
- Multiple I/O control with 1 x button and 1 x LED
- Integrated RTOS and OTA support



Smart Hospital

- Signage solution for nursing station dashboard
- Hospital bedside card (13.3")
- Emergency bedside card (5.6")
- Wardroom door card (13.3")
- Pharmacy medicine management (2.9")

Benefits

- Easy installation without power source or internet cables
- Back light readability supports for patients
- Selectable power type: DC-in / battery
- No power needed during natural disasters



EPD-660, EPD-662 (13.3")

These digital signage panels display hospital room-usage information in public spaces. They are superior to traditional signage/posters, and do not require additional cables.

- Supports IEEE 802.11b/g/n
- Function keys x 2; LED indicator x 1 (2 colors), and OTA support
- Ultra-low power consumption with battery lasts up to 8 months (3 times/ day)



Smart City

- Smart lightings (26" & 31.2")
- Smart bus stops (26" & 31.2")
- In-vehicle signage (13.3")

Benefits

- Easy installation without internet cable
- Sunlight readable for outdoor applications
- Environmentally friendly, ultra low-power solution
- No power needed during natural disasters



EPD-770 (26"), EPD-870 (31.2")

Focused on in-vehicle signage and vehicle parking places, the large format panels are installed in public spaces and display emergency signage and public information as well as directions. No extra power is needed when displaying information in bright sunlight.

- Supports IEEE 802.11 ac/b/g/n, LTE Cat.1 and USB interface
- Supports OTA
- Supports 16-level gray scale and 2560 x 1440 pixel resolution
- 1 bit color display in wide range temperature

Wireless ePaper Selection Guide

EPD Device



Product	EPD-230,EPD-232	EPD-332	EPD-660,662	EPD-210	
Display	Panel Size	2.9"	5.65"	13.3"	2.9"
	Resolution	296x128 pixels	600 x448pixels	1600 x 1200 pixels	296x128 pixels
Interface	LED x 3, Button x 3	LED x 1, Button x 1	LED x 1(2 color), Button x 5		
Dimension	100 x 47 x 17.9 mm/ 3.93 x 1.85 x 0.7 in	140 x 118.3 x 14 mm/ 5.51 x 5.64 x .55 in	235 x 328 x 23 mm/ 9.25 x 12.9 x 0.9 in	66.9 x 29.06 mm/ 2.63 x 1.14 in	
Network	2.4G/IEEE802.15.4 proprietary	2.4G/IEEE802.15.4 proprietary	2.4G/Wi-Fi	NFC	
Power	Battery CR2450x4	Battery CR2450x4	Battery CR2450x4	Battery-less	
Operating Temperatures	0 ~ 50 °C/32 ~ 122 °F	0 ~ 40 °C/32 ~ 104 °F	0 ~ 40 °C/32 ~ 104 °F	0 ~ 40 °C/32 ~ 104 °F	
Certification	CE/FCC/NCC/UL/CB	CE/FCC/NCC/UL/CB	CE/FCC/NCC/UL/CB		
Ordering Information	EPD-230-001 EPD-232-001	EPD-332-001	EPD-660-101 EPD-662-101 EPD-660-001 EPD-662-001 EPD-332-001	EPD-210-101	

EPD Router and Reader



Product	WISE-3240	WISE-3220	WISE-3270	EPR-210
Interface	Ethernet and Wireless	Ethernet and Wireless	Ethernet and Wireless	RF reader
Protocol	IEEE 802.15.4, proprietary	2.4G Wi-Fi	4G/LTE	13.56 MHz (+/-7 KHz)
Connected Quantities	400pcs EPD-230,232,332	100pcs EPD-660,EPD-662	1 pc EPD-770	1 pc EPD-210
Power	DC12V/2A	DC12V/2A	DC12V/2A	Micro USB 5V
Operating Temperatures	-20 ~ 60 °C (-4 ~ 140 °F)	-20 ~ 60 °C (-4 ~ 140 °F)	-20 ~ 60 °C (-4 ~ 140 °F)	0 ~ 70 °C/32 ~ 158 °F
Dimensions	143 x 101 x 30 mm/ 5.6 x 3.97 x 1.18 in	143 x 101 x 30 mm/ 5.6 x 3.97 x 1.18 in	143 x 101 x 30 mm/ 5.6 x 3.97 x 1.18 in	121 x 74.2 x 14.5 mm/ 5.6 x 3.97 x 1.18 in
Certifications	CE/FCC/IC Class B,NCC	CE/FCC/IC Class B, NCC	CE/FCC/IC Class B, NCC	
Ordering Info	WISE-3240IOS-41A1T for Taiwan	WISE-3220IOS-21A1T for Taiwan	WISE-3270IOS-71A1T for Taiwan	LEO-D30-RD1

Enterprise Server



Product	ARK-2250L A2
Description	ARK2250L, Intel i7-6600U, 1 TB HDD, 16GRAM, ADP
Software	DeviceOn/ePaper in Ubuntu 18.4
Connected Quantities	10,000pcs EPD-230/232/332 or 500pcs EPD-660,662,770
Power	DC12V/5A
Certifications	CE/FCC Class B, CCC, BSMI, UL, CCC, BSMI
Ordering Info.	ARK-2250L-EP1A2 with 500 device licenses

Value Server



Product	ARK-1123H A2
Description	ARK-1123H, Intel® Celeron Quad Core J1900 SoC, 128SSD, 8GRAM, ADP
Software	DeviceOn/ePaper in Ubuntu 18.4
Connected Quantities	100pcs EPD-230/232/332 or 20pcs EPD-660,662,770
Power	DC12V/5A
Certifications	CE/FCC Class B, CCC, BSMI, UL, CCC, BSMI
Ordering Info.	ARK-1123H-EP2A2 with 500 device licenses

Ordering Information

Product	Zigbee Like Version	Wi-Fi Version	4G/LTE
EPD Device	EPD-230-001 EPD-232-001 EPD-332-001	EPD-660-101 /EPD-660-001 EPD-662-101/EPD-662-001	EPD-770-101
Router	WISE-3240IOS-41A1E Router for EU WISE-3240IOS-41A1J Router for Japan WISE-3240IOS-41A1N Router for NA WISE-3240IOS-41A1T Router for Taiwan WISE-3240IOS-41A1C Router for China	WISE-3220IOS-21A1E Router for EU WISE-3220IOS-21A1J Router for Japan WISE-3220IOS-21A1N Router for NA WISE-3220IOS-21A1T Router for Taiwan WISE-3220IOS-21A1C Router for China	WISE-3270IOS-71A1E Router for EU WISE-3270IOS-71A1J Router for Japan WISE-3270IOS-71A1N Router for NA WISE-3270IOS-71A1T Router for Taiwan WISE-3270IOS-71A1C Router for China
Server	ARK-1123H-EP2A2 for Entry Ubuntu /1T HD/8G RAM and build in ePaper		

Industrial vs Consumer ePaper Devices

	Advantech Industrial ePaper	Consumer ePaper
Power Capacity	Large (Battery capacity 2480mAh.)	Small (Battery capacity around 400mAh)
Roaming	Good quality with high-frequency updates and supports roaming in different routers	One-time weekly or monthly updates
Interface UI	Multiple buttons and LEDs on the device. EPD server SW adaptable to different user scenarios	No buttons or LED on device. The server SW cannot be adjusted or customized
Temperature	0 ~ 50 °C (32 ~ 122 °F) in panel spec	0 ~ 30 °C (32 ~ 86 °F) resulting in panel burnout within one year

Regional Service and Customization Centers

China	Kunshan 86-512-5777-5666	Taiwan	Taipei 886-2-2792-7818	Netherlands	Eindhoven 31-40-267-7000	Poland	Warsaw 00800-2426-8080	USA	Milpitas, CA 1-408-519-3898
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Worldwide Offices

Asia Pacific

Taiwan	
Toll Free	0800-777-111
Taipei & IoT Campus	886-2-2792-7818
Taichung	886-4-2372-5058
Kaohsiung	886-7-392-3600
China	
Toll Free	800-810-0345
Beijing	86-10-6298-4346
Shanghai	86-21-3632-1616
Shenzhen	86-755-8212-4222
Chengdu	86-28-8545-0198
Hong Kong	852-2720-5118

Asia Pacific

Japan	
Toll Free	0800-500-1055
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Osaka	81-6-6267-1887
Nagoya	81-0800-500-1055
Nogata	81-949-22-2890
Korea	
Toll Free	080-363-9494/5
Seoul	82-2-3660-9255
Singapore	
Singapore	65-6442-1000
Malaysia	
Kuala Lumpur	60-3-7725-4188
Penang	60-4-537-9188
Thailand	
Bangkok	66-02-2488306-9
Vietnam	
Hanoi	84-24-3399-1155
Hochiminh	84-28-3836-5856
Indonesia	
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Australia	
Toll Free	1300-308-531
Melbourne	61-3-9797-0100
India	
Bangalore	91-94-4839-7300
Pune	91-94-2260-2349

Europe

Netherlands	
Eindhoven	31-40-267-7000
Breda	31-76-523-3100
Germany	
Toll Free	00800-2426-8080/81
Munich	49-89-12599-0
Düsseldorf	49-2103-97-855-0
France	
Paris	33-1-4119-4666
Italy	
Milan	39-02-9544-961
UK	
Newcastle	44-0-191-262-4844
London	44-0-870-493-1433
Spain	
Madrid	34-91-668-86-76
Sweden	
Stockholm	46-0-864-60-500
Poland	
Warsaw	48-22-31-51-100
Russia	
Moscow	8-800-555-01-50
St. Petersburg	8-812-332-57-27
	8-921-575-13-59
Czech Republic	
Ústí nad Orlicí	420-465-524-421
Ireland	
Galway	353-91-792444

Americas

North America	
Toll Free	1-888-576-9668
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Irvine	1-949-420-2500
Ottawa	1-815-433-5100
Chicago	1-888-576-9668
Brazil	
Toll Free	0800-770-5355
São Paulo	55-11-5592-5367
Mexico	
Toll Free	1-800-467-2415
Mexico City	52-55-6275-2777
Middle East and Africa	
Israel	072-2410527
Turkey	90-212-222-0422
Turkey-Bursa	90-224-413-3134

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