

Pioneering E-paper Signage
Solutions Provider



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COMPANY INTRODUCTION

30+
Trusted Brands

2000+
Stores

40+
Countries

Effirox Technology is a pioneering innovator in the electronic shelf label industry, the company was among the first in China to develop and manufacture electronic shelf labels. With a strong focus on research, development, and manufacturing, we provide high-performance, energy-efficient, and user-friendly ESL products that enhance efficiency and sustainability across multiple sectors.

Background

Established in 2015 under Dmall Technology (founded in 2004), Effirox leverages 20 years of retail tech expertise. We develop ultra-low-power E-Paper IoT devices with high visibility and wireless connectivity for diverse sectors.





End-to-End Solutions

As a full-service IoT provider, Effirox excels in:

Hardware & Software R&D: Proprietary firmware and cloud platforms for seamless control.

Manufacturing: Scalable OEM/ODM production with stringent quality standards.

Our solutions serve Smart Retail, Smart warehousing and logistics, Smart Manufacturing, Digital Office, Healthcare, Hospitality, and Consumer Electronics.

Multi-scenario Solution Provider and Manufacturer for E-paper Products

Leveraging our proven success in retail electronic shelf labels, we deliver solutions for varied customer demands.



Smart Retail

Smart
Warehousing



Paperless
Office



Modern
Hospitality

Smart
Healthcare

PRODUCT PORTFOLIO

01 Electronic Shelf Labels(2.4G)

- For supermarket and chain stores

02 Bluetooth Digital Labels

- For small shops

03 WiFi E-ink Display

- Used as Digital Room Signage, Hospital bedside information card and many other scenarios

04 Enterprise-grade E-ink Badge

- Used as Work Badge, Exhibitor Badge

05 E-ink Signage



Electronic Shelf Labels

Top choice for small and medium-sized retail businesses

Effirox's Electronic Shelf Labels revolutionize retail by enabling smarter, more efficient operations. Our wireless electronic price tags combined with robust system support, help retailers cut costs, minimize errors, and elevate the customer experience.





Electronic Shelf Labels

1 Hardware Features



2.4G wireless communication



Multi-color e-ink display



Multi-device management



Fast Refresh



Ultra-long Life battery



Durable and anti-collision

Replaceable Battery

4 color E-ink Display



7 color LED

Editable Templates

High Hardness Front Cover to Protect the Screen

Rapid Update Technology



Electronic Shelf Labels

2 ESL software solution

Support cloud solution and local deployment solution



With PC web dashboard and APP
Support Windows, Linux, Mac, Android and iOS

**More
efficient**

**More
flexibility**

**More
secure**



Electronic Shelf Labels

3 Integration

Support software integration and hardware integration

ESL
software

API

Customer's
software
(POS, ERP)ESL
Gateway

API

Customer's
software
(POS, ERP)**More
efficient****More
flexibility****More
possibilities**



Electronic Shelf Labels

4 Product Lineup

1.54 inch



- Screen(mm):
27.51*27.51
- Display Resolution:
200*200 pixel
- Operate Temperature:
0°C--40°C
- Battery Life: 5-10 years

2.13 inch



- Screen(mm):
48.55*23.71
- Display Resolution:
250*122 pixel
- Operate Temperature:
0°C--40°C
- Battery Life: 5-10 years

2.13 inch Freezer



- Screen(mm):
48.55*23.71
- Display Resolution:
250*122 pixel
- Operate Temperature:
-20°C--40°C
- Battery Life: 5-10 years
- Waterproof: IP67

2.66 inch



- Screen(mm):
60.09*30.70
- Display Resolution:
296*152 pixel
- Operate Temperature:
0°C--40°C
- Battery Life: 5-10 years

2.66 inch Freezer



- Screen(mm):
60.09*30.70
- Display Resolution:
296*152 pixel
- Operate Temperature: -
20°C~40°C
- Battery Life: 5-10 years

2.9 inch



- Screen(mm):
66.90*29.06
- Display Resolution:
296*128 pixel
- Operate Temperature:
0°C--40°C
- Battery Life: 5-10 years



Electronic Shelf Labels

4 Product Lineup

3.5 inch



- Screen(mm): 79.68*38.00
- Display Resolution: 384*184 pixel
- Operate Temperature: 0°C--40°C
- Battery Life: 5-10 years

4.2 inch



- Screen(mm): 84.80*63.60
- Display Resolution: 400*300 pixel
- Operate Temperature: 0°C--40°C
- Battery Life: 5-10 years

4.2 inch waterproof



- Screen(mm): 84.80*63.60
- Display Resolution: 400*300 pixel
- Operate Temperature: 0°C--40°C
- Battery Life: 5-10 years
- Waterproof: IP67

5.83 inch



- Dimension(mm): 134.5*114.0*9.0
- Screen(mm): 106.00*31.50
- Display Resolution: 522*152 pixel
- Operate Temperature: 0°C--40°C
- Battery Life: 5-10 years



Electronic Shelf Labels

4 Product Lineup

7.5 inch



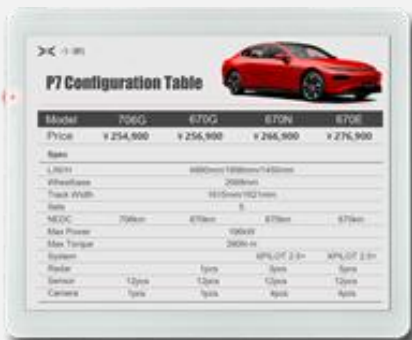
- Dimension(mm): 178.0*127.0*9.0
- Screen(mm): 163.2*97.92
- Display Resolution: 800*480 pixel
- Operate Temperature: 0°C--40°C
- Battery Life: 5-10 years

10.2 inch



- Dimension(mm): 233 x 170.9 x 9
- Screen(mm): 215*143
- Display Resolution (Pixel): 960 x 640
- Working temp.: 0~40°C
- Battery Life: 5-10 years

12.5 inch



- Dimension(mm): 269.8 x 225.7x 11.5
- Screen(mm): 252.98*190.90
- Display Resolution: 1304*984
- Operate Temperature: 0°C--40°C
- Battery Life: 5-10 years

13.3 inch



- Dimension(mm): 294*230*9 mm
- Screen(mm): 275*195
- Display Resolution: 960*680 pixel
- Operate Temperature: 0°C--40°C
- Battery Life: 5-10 years



Electronic Shelf Labels

4 Product Lineup

ESL Gateway(base station)

**POE base station coverage
radius of 20 meters**



Specifications:

- Communication Distance: indoor 20 meters radius
- Recommended maximum ESLs per gateway: 2,000 units
- Communication: 2.4Ghz private protocol
- Working voltage: DC 4.8-5.2V
- Interface: DC-in port, POE, ethernet port

Bluetooth Digital Labels

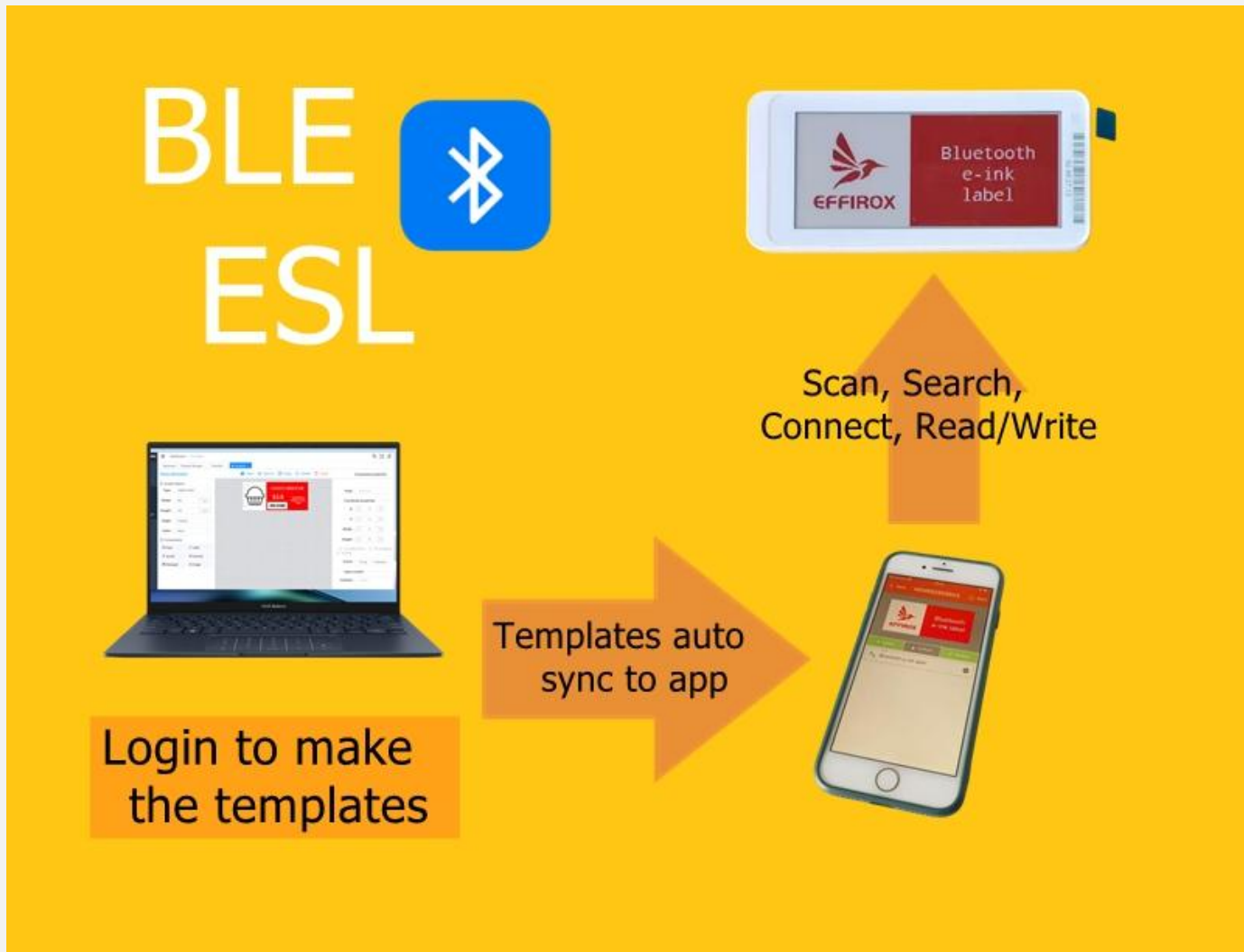
1 Product Features



- Zero Base Stations - Direct phone-to-display control
- 5-Minute Setup - No technical skills required

Bluetooth Digital Labels

2 How It Works



Design custom templates on our user-friendly PC web software, then access and edit them anytime through the app



Bluetooth Digital Labels

2 How It Works



The app supports batch refreshing on multiple devices

Bluetooth Digital Labels

3 Designed for small businesses



Out-of-box solution



Help you save investment in IT technicians and servers



Designed for sustainability: fully recyclable, user-replaceable battery, and a 10-year durability guarantee

Bluetooth Digital Labels

4 Product Lineup

2.1 inch



- Screen(mm): 48.55*23.71
- Display Resolution: 250*122
- Display color: B/W/R 3 color
- Operate Temperature: 0°C--40°C
- Battery Life: 3 years

2.9 inch



- Screen(mm): 66.90*29.06
- Display Resolution: 296*128
- Display color: B/W/R/Y 4 color
- Operate Temperature: 0°C--40°C
- Battery Life: 3 years

4.2 inch



- Screen(mm): 84.80*63.60
- Display Resolution: 400*300
- Display color: B/W/R 3 color
- Operate Temperature: 0°C--40°C
- Battery Life: 3 years

7.5 inch



- Screen(mm): 163.2*97.92
- Display Resolution: 800*480
- Display color: B/W/R 3 color
- Operate Temperature: 0°C--40°C
- Battery Life: one year per charge



Bluetooth Digital Labels

4 Product Lineup

7.3 inch

10.2 inch

E Ink® Spectra 6 full color epaper screen



- Screen(mm): 48.55*23.71
- Display Resolution: 250*122
- Display color:
Black/White/Red/Yellow/Blue/
Green
- Operate Temperature: 0°C--
40°C
- Endurance time: 1 year per
charge
- Battery type: Rechargeable
battery 3000mAh

- Dimension(mm):
238*177*13.5
- Screen(mm): 215*143
- Display color:
Black/White/Red 3 color
- Display Resolution (Pixel):
960 x 640
- Working temp.: 0~40°C
- Endurance time: 1 year per
charge
- Battery: rechargeable battery,
3000 mAh



WiFi E-ink Display

1 Product Features



7.5" E-ink Display with WiFi

Zero Infrastructure -
Works with existing
WiFi

Central Control - Update
100+ displays remotely

Cord-Free, easy to
set up

Comes with
rechargeable battery,
fully recyclable



WiFi E-ink Display

1 Product Features

How It Works?



Use our dedicated web-based software to update the device screens, which allows for customizing templates or uploading images

Zero Infrastructure -
Works with existing
WiFi

Central Control - Update
100+ displays remotely

Multiple sizes for
multiple scenarios

Glare-Free - Perfect for
bright environments



WiFi E-ink Display

2 Product Lineup

7.5 inch



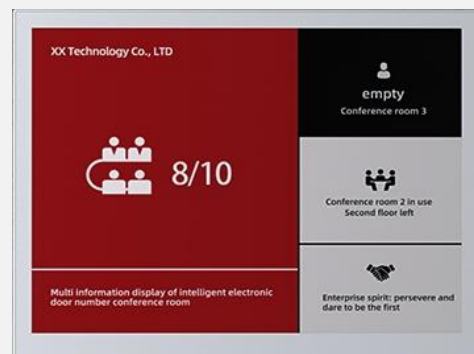
- Dimension(mm): 180*130*13
- Screen(mm): 163.2*97.92
- Display color: B/W/R 3 color
- Display Resolution: 800*480 pixel
- Operate Temperature: 0°C--40°C
- Battery: rechargeable battery, 3000 mAh

10.2 inch



- Dimension(mm): 238*177*13.5
- Screen(mm): 215*143
- Display color: B/W/R 3 color
- Display Resolution (Pixel): 960 x 640
- Working temp.: 0~40°C
- Battery: rechargeable battery, 3000 mAh

13.3 inch



- Dimension(mm): 298*232*13.5 mm
- Screen(mm): 275.52(H) * 195.16(V)
- Display color: B/W/R 3 color
- Display Resolution: 960*680 pixel
- Operate Temperature: 0°C--40°C
- Battery: rechargeable battery, 4000 mAh



WiFi E-ink Display

2 Product Lineup

E Ink® Spectra 6 full color epaper screen

7.3 inch



13.3 inch



- Screen(mm): 48.55*23.71
- Display Resolution: 250*122
- Display color:
Black/White/Red/Yellow/Blue/
Green
- Operate Temperature: 0°C--
40°C
- Endurance time: One charge
lasts for a year
- Battery type: Rechargeable
battery 3000mAh

- Screen(mm): 275.52(H) *
195.16(V)
- Display Resolution: 960*680
- Display color:
Black/White/Red/Yellow/Blue/
Green
- Operate Temperature: 0°C--
40°C
- Endurance time: One charge
lasts for a year
- Battery type: Rechargeable
battery 4000mAh



WiFi E-ink Display

3 Use Cases



Meeting room scheduling displays



Hospital Digital Bedside Card



Reception Digital Information Display



Digital Schedule Management Display



WiFi E-ink Display

4 Accessories for every situation

Wall mount

desktop bracket

clip

Custom accessories upon request





Enterprise-grade Smart E-ink Badge

1 Product Features



E-ink Display

NFC
Technology

Battery
Free



Enterprise-grade Smart E-ink Badge



3.7"

Powerless
Electronic Badge
with epaper display

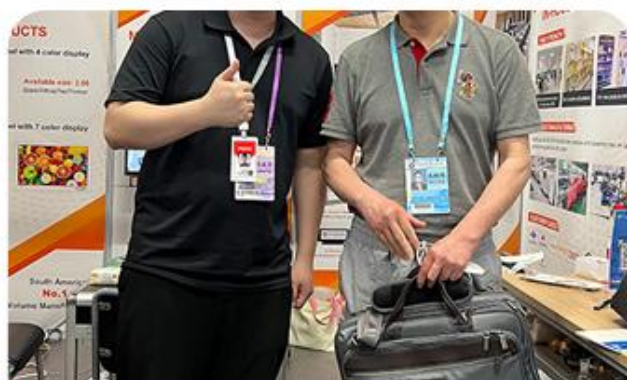
Where can we use it?



Employee Badge



Visitor Badge



Exhibitor Badge



Conference Use



Campus Card



Consumption Card

With IC Card function

It is an IC Card for Access Control or Work Attendance



What is the value of the product?



- Replace the traditional disposable badge, saving material costs;
- Electronic badges can be recycled, which is not only environmentally friendly, but also saves a lot of material costs in the long run;
- Can be used for access control card, attendance card, visitor card, campus card etc.;
- Electronic badges are more efficient and time-saving when you need to make cards in batch.



Enterprise-grade Smart E-ink Badge

2 Product Lineup

3.7 inch
E-ink Badge



Screen type: Dot matrix e-ink screen

Display color:

Black/White/Red

Product size: 110*65*5.2 mm

Screen size: 3.7 inches

Active display area(mm):

47*81.5

Resolution: 240*416

Enterprise-
grade Card
Reader



Dedicated NFC card reader provides enterprise-level reliability and stability, giving you efficient operation experience.

Batch update 100+ labels in 40 minutes.
Delivers 99.9% successful transfer rate.



E-ink Signage

1 Product Features



Cloud-Based Full Color Signage Management Solution

- Cordless, Long Battery
- Remote Content Management
- API Integration



E-ink Signage

1 Product Features



E-Ink Spectra 6
Technology



Faster Refresh



Thin Bezel



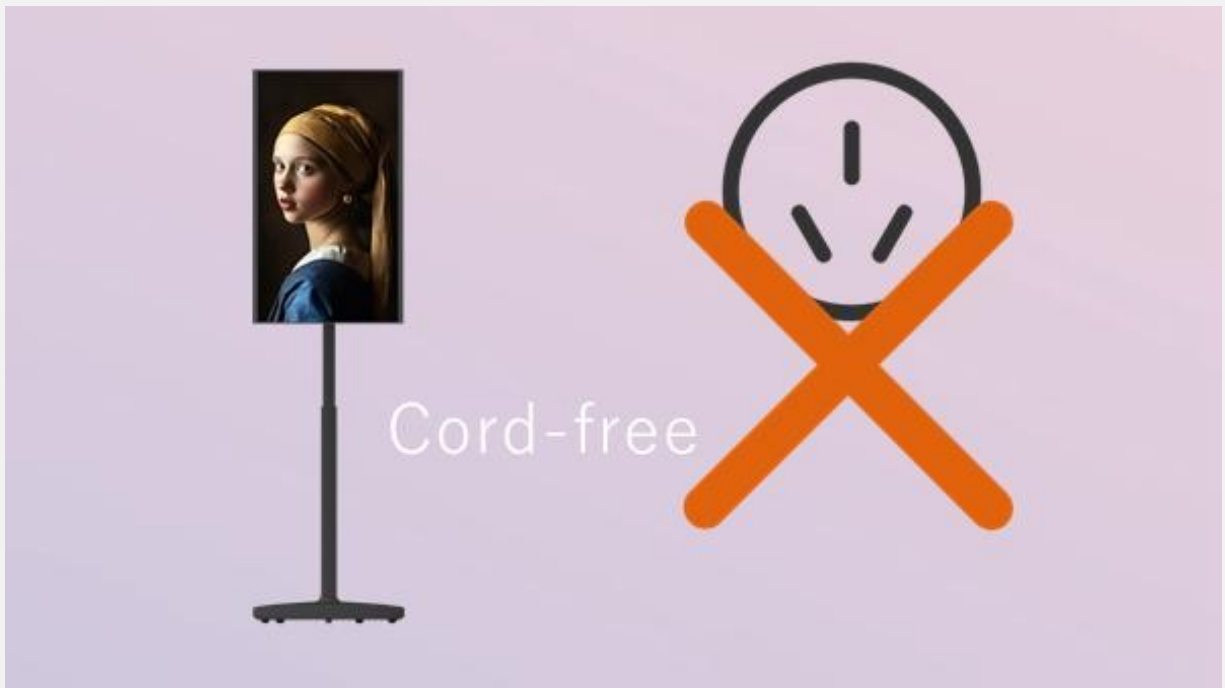
Low Power

Oxide Backplane Technology



E-ink Signage

1 Product Features





E-ink Signage

2 Product Lineup



Model: T133GRGS1



Model: T315GRGS1

Effirox E-Ink Signage: Featuring 13.3" and 31.5" displays with E-Ink Spectra 6 technology, these energy-efficient screens deliver vibrant, full-color content even offline. Remotely manage content via Wi-Fi, schedule promotions, and extend battery life for months. Ideal for retail, libraries, exhibition halls, showrooms, conferences, and hotels—effortlessly adaptable to any space.

Technology

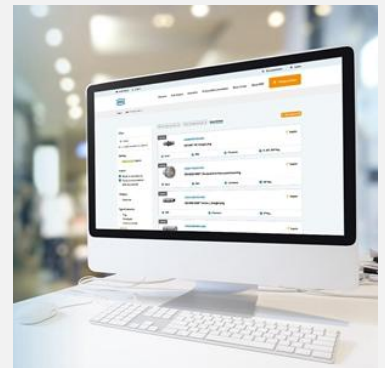
At the core of our innovation lies a suite of proprietary technologies designed to deliver unmatched performance and reliability. These cutting-edge solutions—developed through years of R&D—empower our products to excel in real-world applications. Below, we highlight the key technologies that set us apart and drive value for our customers.



New
Generation E-
paper Display
Technology



Ultralow Power
Wireless RF
Communication



Digital Media
Signaling
System



Internet of
Things gateway
technology



Internet of
Things cloud
platform
technology

Service

From custom software development and hardware solutions to flexible OEM/ODM manufacturing, we partner with you at every stage.

Software Services

Cloud Platform

Private Server Setup

System Integration

Technical Support

SDK

App Development

Hardware Services

ID design

PCBA design

Prototyping

Firmware

Accessories

Packaging

Why Choose Us

10 years of
know-how

10 years of focus on the R&D and production of low-power electronic paper display products.

One stop
service

With hardware and software R&D teams, we provide one-stop services from R&D, design, production to after-sales.

Well-known
brands
choose us

More than 30 well-known domestic and foreign brands choose our products.

Customized service from hardware and software



Housing
customize



Brand
customization



Software
customize



Accessories
customize

Customer Cases



Xiaomi

Sector: Electronic Stores
Year of installation: 2022



Panasonic

Sector: Home appliances
Year of installation: 2023



Hema Fresh

Sector: supermarket chain
Year of installation: 2021



HUAWEI

Sector: Electronic Stores
Year of installation: 2022

Customer Cases



State Grid

Sector: power sector
Year of installation: 2024



Supercor

Sector: supermarket chain
Year of installation: 2023

Contact Us

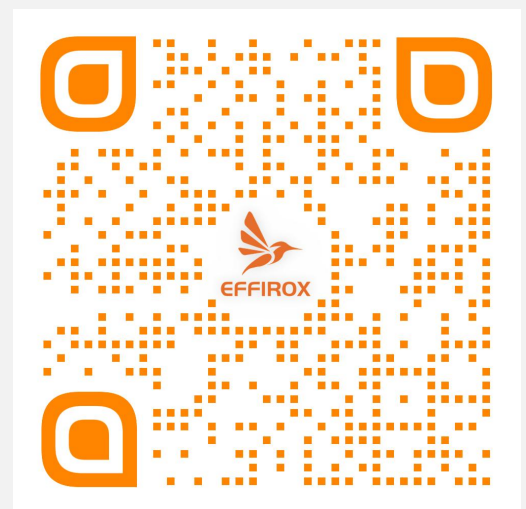
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