

# TIBURN E-Ink Smart Badge

## User Guide & Product Overview

### 1. Product Overview

The **TIBURN E-Ink Smart Badge** is a smart electronic badge equipped with an **E-Ink (electronic paper) display**, designed for employee identification, access control, attendance, and credential display.

Unlike traditional printed ID cards, the TIBURN Smart Badge allows **wireless content updates, long battery life**, and **system integration** through NFC and Bluetooth technologies.

#### Key Advantages

Low-power **E-Ink display** (content remains visible without power)

**NFC + Bluetooth** dual communication

Editable content via mobile application

Reusable and environmentally friendly

Suitable for enterprise, education, and event management scenarios

---

### 2. Core Functions

#### 2.1 E-Ink Display

Displays names, titles, departments, QR codes, icons, or credentials

Ultra-low power consumption

Content remains visible even when the battery is depleted

Clear readability under strong lighting conditions

---

## 2.2 Wireless Communication

### NFC (Near Field Communication)

Used for quick pairing, data reading, and secure identification

Compatible with access control terminals and attendance systems

Standard frequency: **13.56 MHz**

### Bluetooth (BLE)

Enables connection with mobile devices

Supports remote content updates and device management

Optimized for low power consumption

---

## 2.3 App-Based Management

Edit badge content directly from a mobile app

Sync updates via NFC or Bluetooth

Manage multiple badges (enterprise use)

Supports text, layout, and QR code updates

Platform support may vary by region and version. Android support is standard; iOS support depends on current firmware and app releases.

---

## 3. Basic Operation Guide

### 3.1 Initial Charging

Charge the badge using a **Qi-standard wireless charger**

Fully charge before first use

Typical usage allows **months of operation** due to E-Ink's low power requirements

---

## 3.2 App Installation

Open **store.tiburn.net** or **Apple App Store**

Search for "**Paperview**" official app

Install and launch the app

Register or log in

Enable **Bluetooth and NFC permissions**

---

## 3.3 Device Pairing

You can pair the badge in two ways:

### **Option 1: NFC Pairing**

Place the badge close to the phone's NFC sensor

Follow on-screen confirmation

### **Option 2: Bluetooth Pairing**

Open the app → Device list → Select badge → Confirm pairing

Once paired, the badge appears in your device list for management.

---

## 3.4 Editing & Updating Badge Content

Using the app, you can:

Edit name, role, department, or ID number

Add or update QR codes

Change layout or display content

Sync changes to the badge wirelessly

The E-Ink screen refreshes automatically after synchronization.

---

## 4. Standards & Compliance

Communication Standards

**NFC:** ISO/IEC 14443, 13.56 MHz

**Bluetooth:** BLE (Bluetooth Low Energy)

Charging Standard

**Qi wireless charging**

Operating Conditions

Recommended temperature: **0°C – 40°C**

Indoor and controlled environments preferred

---

## 5. Safety & Usage Recommendations

Avoid strong magnetic fields or heavy metal interference

Do not bend or apply excessive pressure to the E-Ink screen

Keep firmware and app updated for best performance

Ensure stable connection during data synchronization

---

## 6. Maintenance & Care

Clean with a soft, dry cloth

Do not use chemical cleaners or solvents

Store in a dry place when not in use

Recharge periodically if stored for long periods

---

## 7. Typical Use Cases

**Corporate offices** – employee ID, access control

**Schools & universities** – student and staff identification

**Conferences & events** – visitor and temporary badges

**Industrial sites** – certification and qualification display

**Healthcare & labs** – role identification and compliance labeling

---

## 8. Summary

The **TIBURN E-Ink Smart Badge** combines **electronic paper technology, NFC,** and **Bluetooth connectivity** to deliver a modern, reusable, and efficient identification solution.

With mobile app control, long battery life, and system integration capabilities, it is an ideal replacement for traditional printed ID badges in professional environments.