# D7676

# Tri-Color Photovoltaic E-Paper Conference Nameplate


## Description

The photovoltaic nameplate is a low-carbon and environmentally friendly device that utilizes low-light photovoltaic technology to continuously harvest energy. Through wireless technologies (Bluetooth BLE and NFC), it integrates with mobile devices, base stations, and cloud management platforms to enable content updates on the e-paper display, realizing an intelligent paperless solution. It is suitable for various static display scenarios without wiring, such as exhibition halls, conferences, offices, and service industries.

The device features a dual-sided 10.85-inch tri-color (black, white, red) e-paper display, providing a non-glare, soft, and wide viewing angle visual experience. By adopting indoor photovoltaic technology and a lithium polymer battery for energy storage, the built-in photovoltaic panel can continuously harvest energy and charge under indoor lighting conditions. When lighting intensity and duration meet requirements, the device can operate continuously without external power supply, making it an ultra-low-carbon, energy-saving, and environmentally friendly high-tech intelligent product.

## Features

**Indoor Photovoltaic Technology**

- Continuously harvests energy under indoor lighting conditions, enabling long-term operation in suitable lighting environments.
- Automatically adjusts working modes based on ambient light; enters sleep mode in low-light conditions for intelligent power management.
- If prolonged insufficient lighting leads to battery depletion, emergency power can be supplied via a USB

Type-C interface.

**EPD Display Technology**

- Utilizes e-paper display with bistable technology, enabling zero power consumption to maintain the displayed image.
- Features wide viewing angle, clear and comfortable display, no blue light, and eye-friendly paper-like visual effect.
- Reflective display offers better visibility under strong light; anti-glare surface treatment reduces light pollution.

**Wireless Transmission Technology**

- Designed for wiring-free scenarios, supports Bluetooth 5.0 BLE and NFC for high-speed, low-power wireless transmission.
- Uses standard protocols for stability and strong compatibility. Implements data encryption, account binding, and local transmission restrictions to meet security requirements.

**Multi-Platform Management**

- Supports point-to-point and one-to-many device management via smartphones and tablets.
- Supports base station networking and backend management platforms.
- Supports both cloud-based remote control and local LAN management.

## Specifications

| Model | D7676 |
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| Display Size | 10.85-Inch dual-sided EPD |
| Active Area | 259.76×91.68 mm |
| Resolution | 1360 (H) × 480 (V) |
| DPI | 133 |
| Viewing Angle | Nearly 180°, anti-glare glass cover |
| Colors | Black, White, Red |
| Product Dimensions | 284 × 87 × 130 mm |
| Weight | 780 ± 5 g |
| Display Type | Bistable E-ink display |
| Orientation | Landscape |
| Viewing Angle | Nearly 180° |
| Operating Temperature | 0°C ~ 40°C |
| Storage Temperature | -25°C ~ 60°C |
| Battery Capacity | 230 mAH |
| Power Supply | Photovoltaic panel charging + lithium polymer battery |
| Endurance | Approx. 10 hours/day under 300 Lux lighting; standby indefinitely |
| Operating Current | Refresh: 50 mA; Standby: 0.2 mA |
| Bluetooth Version | BLE 5.0 compatible |
| NFC | ISO/IEC 14443-A |
| Data Rate | 1 Mbps / 2 Mbps |
| Channel Spacing | 2 MHz |
| Frequency Band | 2.402 ~ 2.480 GHz |
| Tansmit Power | -20 to +10 dBm (3 dB steps) |
| Receiver Sensitivity | 97 dBm @ BLE 1 Mbps<br>-103 dBm @ BLE 125 Kbps |

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| | -90 dBm |
| Working Mode 1 | Image transfer via NFC at the center of the display |
| Working Mode 2 | Image transfer via Bluetooth from mobile phone (range ≥15 m, unobstructed) |
| Working Mode 3 | PC control via Bluetooth base station (range ≥15 m, unobstructed) |
| Mobile OS | Android (7.0 and above), HarmonyOS |
| Server OS | Windows 7, Linux |
| Cloud Server | Supported |
| Offline Mobile Version | Android supported |
| System Integration | Supports third-party system integration |