

SPOTLIGHT HARDWARE

# Digital Food Labels

Bring connected food information to serving lines, shelves, coolers, stations, and more with durable, wireless e-ink digital food labels.\*

## Why you'll love our Digital Food Labels:

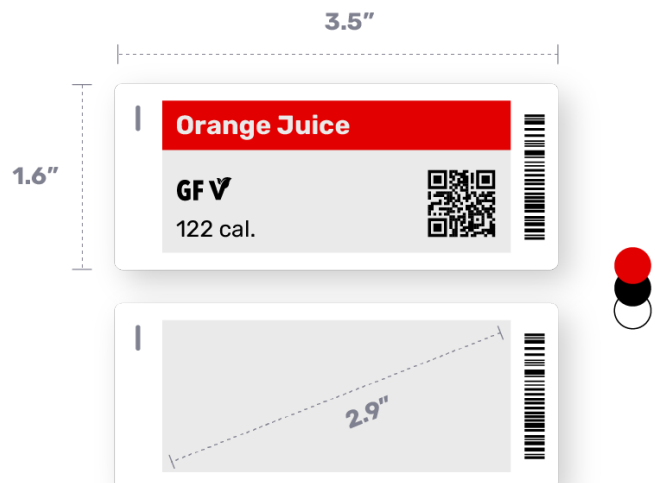
- > Wireless and battery-powered, digital food labels are built to be placed anywhere you need them with up to 5 years of battery-life.
- > Built in a durable plastic casing, labels are temperature tolerant, sturdy against falls, and can be wiped down daily.
- > High-contrast e-ink (EPD) display screens provide excellent readability for your food item's information in black, white, and red.
- > All data transmissions are encrypted to ensure the privacy and integrity of your data.
- > Uses speedy, energy-efficient BLE 5.0 (Bluetooth Low Energy) wireless protocol to communicate bi-directionally to the Spotlight Base Station. With BLE, individual labels never have to connect to your network.
- > Pre-configured to connect to your Spotlight Base Station(s) out of the box.

## Digital Food Label Options:

### Small Labels

**BEST FOR:** Individual item labels

- **Size: 3.5" x 1.6"** (2.9" screen diagonal)
- 3 Color (black, white, red) high-contrast e-ink display
- Anti-glare, slim design
- 5 year battery life
- Temperature tolerant: 32°F - 104°F
- Durable - sturdy against falls and daily wipe downs (should not be submerged in water)

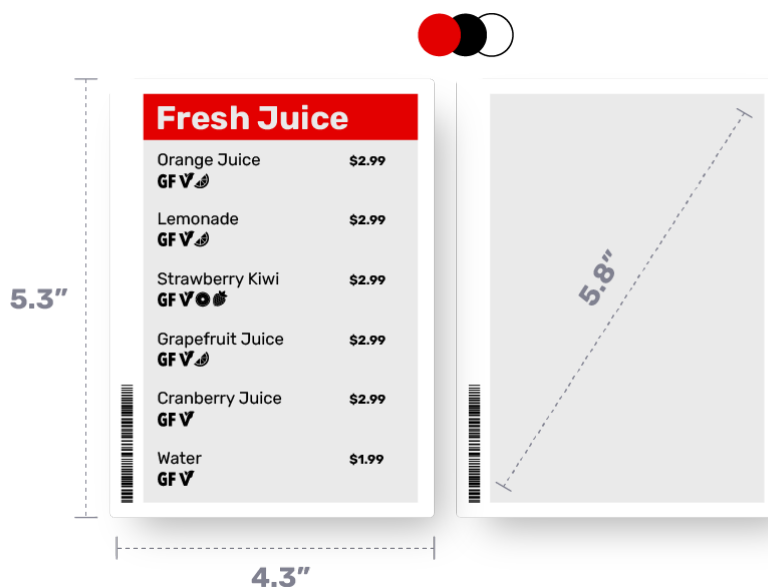


\*Annual subscription of Nutrislice Spotlight required per location for active digital labeling capabilities.

## Medium Labels

**BEST FOR:** Item lists, individual featured item labels

- **Size: 5.3" x 4.3"** (5.8" screen diagonal)
- 3 Color (black, white, red) high-contrast e-ink display
- Slim design, vertical or horizontal display
- 5 year battery life
- Temperature tolerant: 32°F - 104°F
- Durable - sturdy against falls and daily wipe downs (should not be submerged in water)



Various attachment hardware options are available for each label size. Nutrislice helps each location select the appropriate options for their environment during implementation.

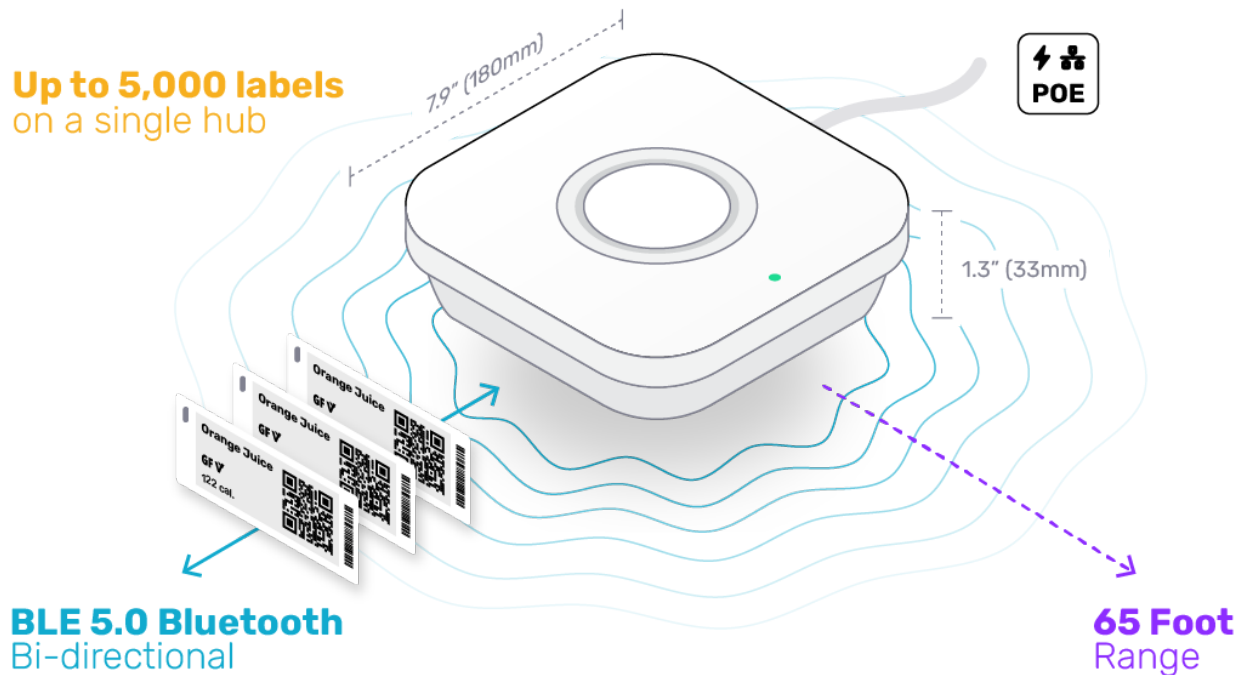
## Digital Food Labels Hardware Specifications:

Device Model		Small Label (3.5 x 1.6 Label - BWR)	Medium Label (5.3 x 4.3 Label - BWR)
Display Features	Display Technology	EPD (electronic paper display) or e-ink	EPD (electronic paper display) or e-ink
	Active Display Area	2.63 x 1.15 in (66.9 x 29.1 mm)	4.68 x 3.47 in (118.8 x 88.2 mm)
	Resolution	296 x 128 pixels	648 x 480 pixels
	Pixel Density	112 DPI	138 DPI
	Pixel Colors	Black, White, Red	Black, White, Red
Physical Features	LED	1x RGB	None
	NFC	Available on each label for future applications (not currently supported in Nutrislice Admin).	Available on each label for future applications (not currently supported in Nutrislice Admin).
	Working Temperature	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)

	<b>Working Humidity</b>	0% to 95% non-condensing	0% to 95% non-condensing
	<b>Dimensions</b>	3.54 x 1.61 x .48 in (90 x 41 x 12.1 mm)	5.33 x 4.33 x .35 in (135.4 x 110 x 9 mm)
<b>Wireless</b>	<b>Wireless Protocol</b>	BLE 5.0 (Bluetooth Low Energy), closed loop, non-discoverable	BLE 5.0 (Bluetooth Low Energy), closed loop, non-discoverable
	<b>Encryption</b>	128-bit AES	128-bit AES
<b>Battery</b>	<b>Battery</b>	2x CR2450 lithium coin batteries	8x CR2430 packaged lithium coin batteries
	<b>Battery Life</b>	5 years (4 updates/day)	5 years (4 updates/day)
<b>Compliance</b>	<b>Certification</b>	CE, RoHS, FCC	CE, RoHS, FCC
<b>Warranty</b>	<b>Device Warranty</b>	2 year warranty from manufacturer defect. Advanced replacement.	2 year warranty from manufacturer defect. Advanced replacement.

# The Spotlight Base Station

The Nutrislice cloud platform communicates with your digital food labels onsite using the Spotlight Base Station.\*



## Why you (and IT) will love the Spotlight Base Station:

- Uses speedy, energy-efficient BLE 5.0 (Bluetooth Low Energy) wireless protocol to communicate bi-directionally to labels. With BLE, individual labels never have to connect to your network, just the Base Station.
- Pre-configured to connect to your labels and the Nutrislice servers out of the box.
- Data and power are supplied via a single network cable from the POE injector (included) or direct POE (if available).
- No special firewall configuration is generally needed. The Base Station instantiates all connections to Nutrislice servers via standard web protocols.
- All data transmissions are encrypted to ensure the privacy and integrity of your data.
- Supports up to 5,000 labels within a 65ft radius. Wall and ceiling mounting options included.

*\*Annual subscription of Nutrislice Spotlight required per location for active digital labeling capabilities.*

## Spotlight Base Station Hardware Specifications:

<b>Physical Characteristics</b>	<b>Power</b>	<b>Base Station input:</b> POE 48VDC/0.32A 802.3af <b>POE Injector (included) input:</b> Standard 110VAC
	<b>Network Port</b>	Wired Ethernet (Cat 5e/6)
	<b>Dimensions</b>	7.9x7.9x1.3 in (180x180x33mm)
	<b>Mounting</b>	Ceiling Mount / Wall Mount
	<b>Certification</b>	CE/RoHS
	<b>Max Power Consumption</b>	12W
	<b>Working Temperature</b>	14°F to 140°F (-10°C to 60°C)
	<b>Working Humidity</b>	0% to 95% non-condensing
<b>Wireless Characteristics</b>	<b>Base Station to Labels Wireless Protocol</b>	BLE 5.0 (Bluetooth Low Energy), closed loop, non-discoverable
	<b>Encryption</b>	128-bit AES
	<b>Label Operating Frequency</b>	2.4 - 2.4835GHz
	<b>Coverage Range</b>	65ft+ (20m+) radius. Assumes no signal-blocking obstructions between Base Station and labels.
<b>Advanced Characteristics</b>	<b>Network Ports &amp; Protocols</b>	Outbound TCP connections from Base Station to designated Nutrislice cloud server URL, Port 1883, MQTT protocol. (No inbound connections)
	<b>Labels Supported</b>	Up to 5,000 per Base Station
	<b>Label Roaming</b>	Supported - Spotlight labels will automatically connect to any nearby base station.
	<b>Load Balancing</b>	Supported - Labels will load balance on nearby base stations.
	<b>Base Station Status</b> (Online/Offline)	Supported. Status shown in admin.
	<b>Label Status</b> (Battery life, Online/Offline)	Supported. Status shown in admin.
<b>Warranty</b>	<b>Device warranty</b>	2 year warranty from manufacturer defect. Advanced replacement.