nutrislice

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:

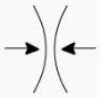
- Wireless and battery-powered, digital food labels are built to be placed anywhere you need them with up to 1-3 years of battery-life.
- Built in a durable plastic casing, labels are temperature tolerant, sturdy against falls, and can be wiped down daily.
- High-contrast e-ink (EPD) display screens 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.

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

Digital Food Label Options

All label sizes and case colors have the following benefits

4-color e-ink display (black, white, red, yellow)



Slim, modern case design

1 to 3 year battery life

Temperature tolerant: 32°F - 104°F

Durable against falls and daily wipe downs

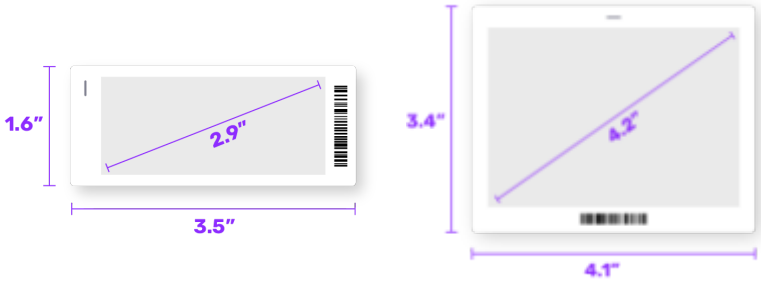
Small Labels

Images not drawn to scale.

BEST FOR: Labeling basic details for individual items. Light-weight. Fits all smaller mounting hardware.

OPTIONS:

- 2.9" White Case Label (C29ZV)
- 2.9" Black Case Label (C29ZB)
- 4.2" White Case Label (C42ZV)
- 4.2" Black Case Label (C42ZB)

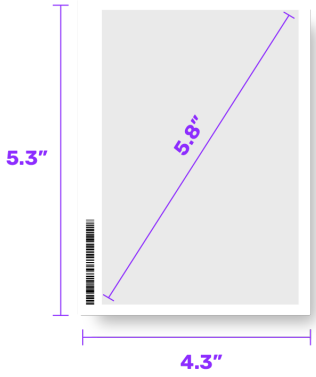


Medium Labels

BEST FOR: Displaying item lists & individual item info. Fits most smaller mounting hardware.

OPTIONS:

- 5.8" White Case Label (C58ZV)
- 5.8" Black Case Label (C58ZB)

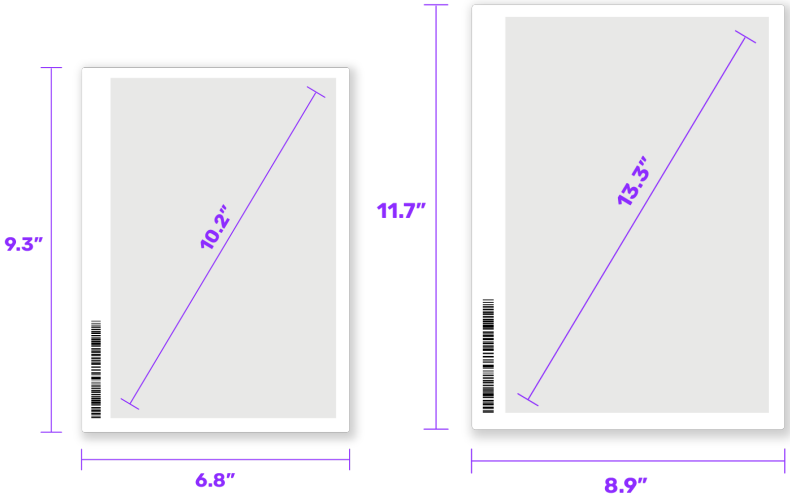


Large Labels

BEST FOR: Detailed item lists & individual item info. More limited mounting hardware selection.

OPTIONS:

- 10.2" White Case Label (C102ZV)
- 13.3" White Case Label (C133ZV)



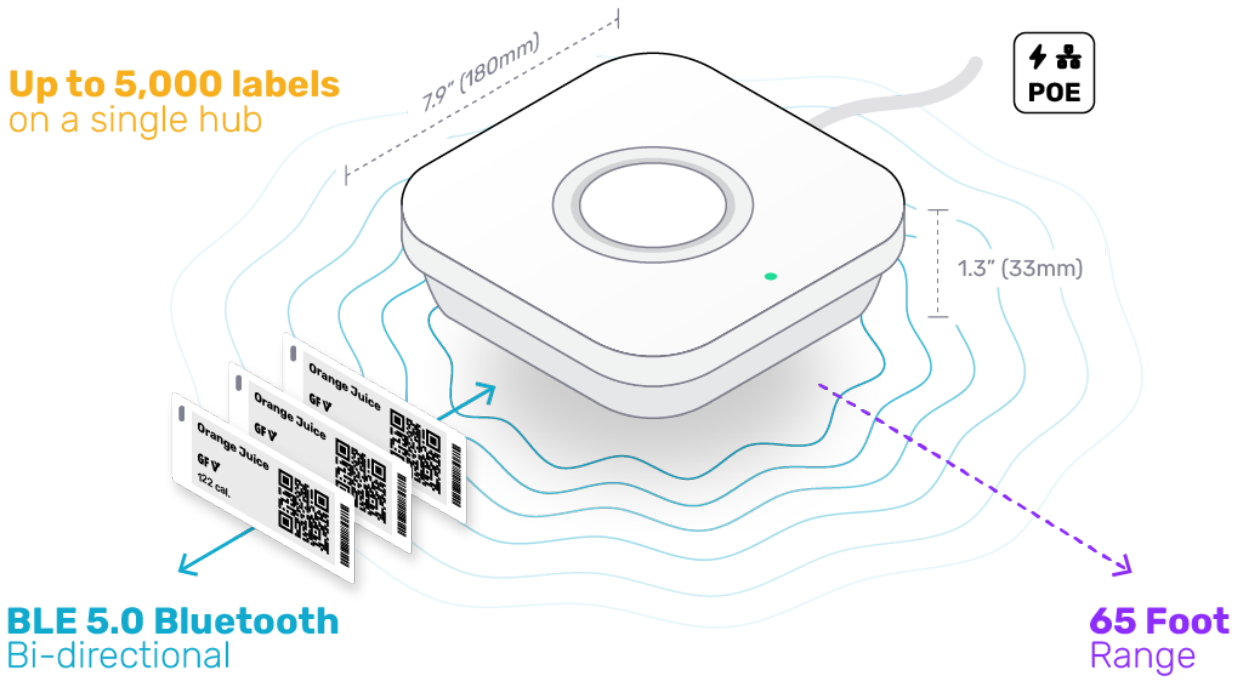
**Various attachment hardware options are available for each label size. Nutrislice helps each location select the appropriate options for their environment during implementation.*

Digital Food Labels Specifications: (Compare by size and case color)

Device		Small Labels				Medium Labels		Large Labels	
		2.9″		**4.2″**		**5.8″**		**10.2″**	**13.3″**
Model #		C29ZV	C29ZB	C42ZV	C42ZB	C58ZV	C58ZB	C102ZV	C133ZV
Physical Features	**Case Color**	White	Black	White	Black	White	Black	White	White
	Dimensions (W x H x D)	3.5 x 1.6 x .5 in	3.6 x 1.6 x .3 in	4.1 x 3.4 x .5 in	4.1 x 3.4 x .4 in	5.3 x 4.3 x .4 in	5.2 x 4.3 x .5 in	9.3 x 6.8 x .4 in	11.7 x 8.9 x .4 in
	LED	1x RGB		1x RGB		None	1x RGB	None	None
	NFC	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)							
	Working Humidity	0% to 95% non-condensing							
Display Features	**Display Tech.**	EPD (electronic paper display), AKA: e-ink							
	Active Display Area	2.6 x 1.2 in (2.9″ diagonal)		3.3 x 2.5 in (4.2″ diagonal)		4.7 x 3.5 in (5.8″ diagonal)		8.5 x 5.7 in (10.2″ diagonal)	10.9 x 7.7 in (13.3″ diagonal)
	Resolution	296 x 128px		400 x 300px		648 x 480px		960 x 640px	960 x 680px
	Pixel Density	112 DPI		119 DPI		138 DPI		113 DPI	88 DPI
	Pixel Colors	Black, White, Red, Yellow							
Wireless	**Protocol**	BLE 5.0 (Bluetooth Low Energy), closed loop, non-discoverable							
	Encryption	128-bit AES							
Battery	**Battery**	2x CR2450 lithium coin batteries	2x CR2430 lithium coin batteries	2x CR2450 lithium coin batteries		4x CR2430 lithium coin batteries (packaged)	4x CR2450 lithium coin batteries (packaged)	4x CR2430 lithium coin batteries (packaged)	4x CR2430 lithium coin batteries (packaged)
	Battery Life	1-3 years (4 updates/day)							
Compliance	**Certification**	CE, RoHS, FCC							
Warranty	**Per Device**	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:

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