



## epaper for retail:

### The next generation of electronic shelf edge labels

ZBD's graphic electronic shelf labeling (ESL) solution combines high-definition zero-power, bistable LCD displays ('epaper for retail') with a 'light touch' communications technology that can wirelessly update individual displays, a store with thousands of displays, or an entire retail enterprise, at the touch of a button.



epop (electronic point of purchase) displays remove the need for paper labels, offering retailers a cost-effective and environmentally-friendly alternative.

ZBD's total store solution really is 'plug and go'. The ease of use and extraordinary reliability of ZBD's technology provides retailers with a solution to automate customer

communication, prices and promotions: virtually maintenance-free and without the need for expensive and unreliable infrastructure.

The epops' wireless capability puts a fantastic tool into retailers' hands: the ability to change any product-related information anywhere, any time.

"ZBD's solution has delivered measurable savings... in staff hours that were previously spent in printing and placing paper tags."



**Piret Dubout**  
Marketing Director  
EMT, Estonia

#### ZBD's epop solution delivers:

- Dynamic price, promotion and product information at point of purchase
- Simple to install, integrate and maintain
- ROI in as little as 12 months
- Instant response to competitor activity
- Fully graphical content including logos, pictures and scannable barcodes
- Low-cost infrastructure
- Low total cost of ownership
- Self-installation capability

Save money and improve operational performance

ZBD's graphic displays are the enabling technology for a host of business process improvements that impact both cost reduction and performance improvement. ZBD has been working with pioneering retailers and retail industry experts in the USA and Europe to develop its ROI (return on investment) model.

The model has been developed over time to enable the relevant Use Cases for individual retailers to be modeled within a lifetime P & L and Cashflow simulation, providing scientific risk-assessment and 'what-if' scenarios. The ROI model is available for 'in-house' utilization by participating retailers and solution providers.

"We found that the ZBD system was not only the best looking product, but its light touch infrastructure and low total cost of ownership made it the only choice for us."



**Dr Maurizio Cattaruzza**  
IT Manager  
Coop Nordest, Italy



Supports scannable barcodes

The epop 50 is the smallest display in ZBD's product range at 2.75" x 1.26" (70mm x 32mm) and is designed for mass-market and fmcg installations: convenience store, large-scale grocery, pharmaceutical and small-ticket products throughout specialty.

The epop 50 display features very high resolution (111dpi) to provide excellent readability and data display capability for the relatively small real-estate available within these store environments.

The screen is fully graphical - a 'blank sheet of paper' - without any restrictions or arbitrary limitations to display and update graphic images, scanner-readable barcodes, numeric formats and text messaging.

## epop 50

### TECHNICAL DATA:

#### DIMENSIONS

External: 2.75" x 1.26" (70mm x 32mm)

Visible screen area: 2.1" x 0.94" (53mm x 24mm)

#### DISPLAY

Full graphic epaper image

20,160 pixels @ 111dpi

Bistable (no power required to retain image indefinitely)

High-contrast black/white

Landscape or Portrait

Supports scannable barcodes



The epop 55 is the 'big sister' display to the epop 50 in ZBD's product range. At 3.46" x 1.65" (88mm x 42mm), it is designed to meet the needs of large-scale retailers (typically stores with over 40,000 SKUs), in both Europe and the USA, as well as specialty stores such as mobile phone and consumer electronics stores.

As with the epop 50, the epop 55 has high screen definition to support scannable barcodes - e.g. for re-ordering codes or replenishment data. The epop 55 provides a larger screen area to support a wide range of functions including customer communications, operational compliance and revenue optimization.

## epop 55

### TECHNICAL DATA:

#### DIMENSIONS

External: 3.46" x 1.65" (88mm x 42mm)

Visible screen area: 2.83" x 1.29" (72mm x 33mm)

#### DISPLAY

Full graphic epaper image

23,040 pixels @ 92dpi

Bistable (no power required to retain image indefinitely)

High-contrast black/white

Landscape or Portrait

Supports scannable barcodes



The epop 300 is one of ZBD's two mid-range display options and has been designed for fuller product or promotional information.

The epop 300 is suitable for both food and non-food retail applications, and is fully graphical: supporting complex product images, brand logos and detailed consumer information.

The epop 300, which is 4.4" x 2.2" (112mm x 57mm), can be used in both landscape and portrait mode and is particularly useful for multi-product display and 'product list' presentation.

## epop 300

### TECHNICAL DATA:

#### DIMENSIONS

External: 4.4" x 2.2" (112mm x 57mm)  
Visible screen area: 3.7" x 1.54" (94mm x 39mm)

#### DISPLAY

Full graphic epaper image  
64,000 pixels @ 109dpi  
Bistable (no power required to retain image indefinitely)  
High-contrast black/white  
Landscape or Portrait  
Supports scannable barcodes



The epop 500 mid-range display is 4.1" x 3.22" (103mm x 82mm) and slightly larger than the epop 300.

Like the epop 300, the epop 500 is suitable for both food and non-food retail applications where rich consumer or promotional information needs to be displayed.

ZBD's mid-range displays can be used within stores as special or promotional displays - being used temporarily for specific (e.g. 'on offer') products for a limited period of time and then simply reassigned within the store to new products as required.

## epop 500

### TECHNICAL DATA:

#### DIMENSIONS

External: 4.1" x 3.22" (103mm x 82mm)  
Visible screen area: 3.26" x 2.44" (83mm x 62mm)

#### DISPLAY

Full graphic epaper image  
76,800 pixels @ 100dpi  
Bistable (no power required to retain image indefinitely)  
High-contrast black/white  
Landscape or Portrait  
Supports scannable barcodes



The epop 900 is ZBD's large format display with 172,800 pixels. The epop 900 is designed for big ticket items, Fruit and Vegetable and Fresh produce displays in hypermarkets and throughout Department Stores and Specialty Stores for full product data or product range information.

ZBD's bistable high screen definition for the epop 900 has been designed to support large graphical images, data lists as well as scannable 1D and 2D barcodes - for enriched data, re-ordering, product availability and web links. Like all ZBD epops, the epop 900 supports 3 display pages that can be switched by the system as required.

## epop 900

### TECHNICAL DATA:

#### DIMENSIONS

External: 6.3" x 5" (160mm x 127mm)  
Visible screen area: 5" x 3.8" (129mm x 96mm)

#### DISPLAY

Full graphic epaper image  
172,800 pixels @ 100dpi  
Bistable (no power required to retain image indefinitely)  
High-contrast black/white  
Landscape or Portrait  
Supports scannable barcodes

## HOW IT WORKS

### DATA

- Everyday pricing
- Price optimization
- Promotions
- Inventory
- Merchandising and space planning
- Consumer and competitor data



The ZBD architecture couldn't be simpler. Data is managed by the Bounce processor taking feeds from any combination of local or remote sources. Data can be hosted or managed locally. Formatted images are sent wirelessly via the Bounce communicator - typically a single, small transmitter/receiver positioned within the store. Integration can be achieved with either ZBD's productivity toolset or its API (application programming interface).

The Solution's low-cost infrastructure and multi-functionality can deliver a low total cost of ownership and a Return on Investment in as little as one year.

**Cut costs, increase operational performance and improve customer experience...**

**"ZBD's solution was the only viable option, making it the natural choice for our new 'ON' store... the system has been extremely easy to implement and it's very easy to use."**

**Vann's** Matt Ranta  
Marketing Manager  
Vann's Inc. USA



### ABOUT ZBD

Formed in 2000 out of QinetiQ, the inventors of LCD technology in the 1970's, ZBD is a pioneering company with its own R & D, IPR and scalable manufacturing processes that enable it to deliver a solution with practical commercial advantages for retailers.

ZBD is a leader in the design and supply of electronic shelf edge labels and associated software solutions for the retail industry. The company has developed the next generation of LCD, creating high-contrast bistability that requires no battery power to retain its

image. Its product portfolio provides retailers with a total store solution and the ability to manage and update pricing, product and promotional information at point of purchase, dynamically.

### CONTACT US

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