

EMBARK™ E-PAPER DISPLAY

STATIONARY PASSENGER INFORMATION SYSTEM



EMBARK

INTELLIGENCE, SAFETY AND
EFFICIENCY IN TRANSIT



32" PORTRAIT E-PAPER DISPLAY, WITH
OPTIONAL PUSH BUTTON (ADDITIONAL
FORM FACTORS AVAILABLE)

SOLAR
POWER
OPTION

FLEXIBLE

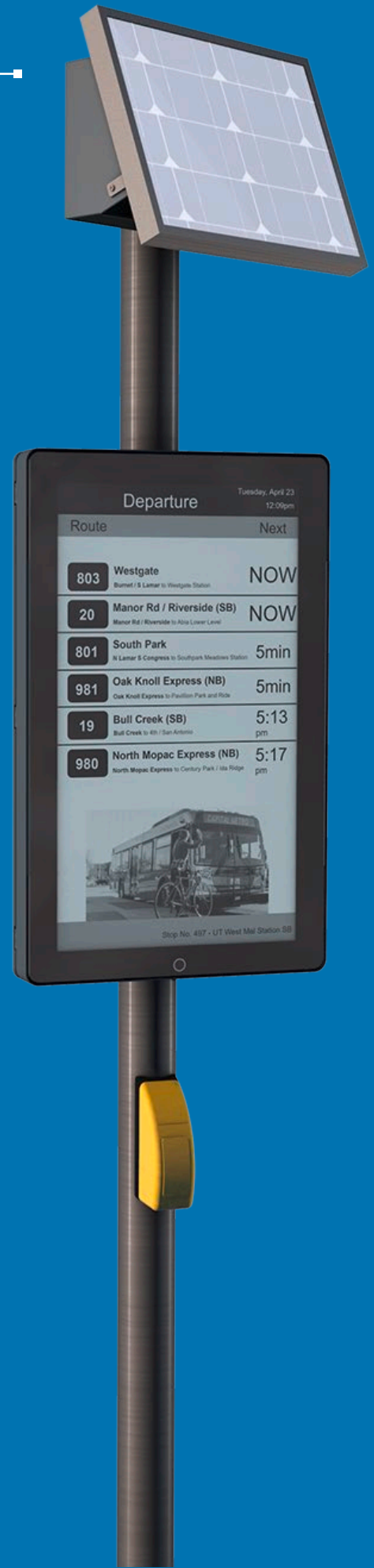
- Available in 32" and 13" display options
- High resolution display supports a variety of graphics, including QR codes
- Multi-page display delivers real-time updates, including rider alerts, next bus, route information, maps, and more
- Remote updates, diagnostics, and system health monitoring reduce labor and maintenance costs
- Features anti-reflective, laminated safety glass
- Installation is simple and low cost, without requiring foundation work

ENERGY EFFICIENT

- Optional solar power for grid independence with an integrated cellular data modem for communications
- Ruggedized design for long-lasting performance; battery lifetime exceeds eight (8) years; solar panel, 25 years
- High-powered solar panels can support display indefinitely without direct sunlight
- Elegant and easy-to-read front-lit design provides excellent readability, even in direct sunlight
- Ultra-low power LEDs are activated by motion and light-detecting sensors for optimal energy efficiency, enhanced visibility and safety

ACCESSIBLE

- Push button allows riders to view additional display pages
- Exceptional screen resolution enables detailed graphics, upcoming departures and timetables to be displayed on the same screen
- On-demand audio announcements support accessibility and ADA compliance



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CONTENT MANAGEMENT SYSTEM

- The content management system (CMS) is typically deployed as a cloud-hosted solution, but on-premise solutions are also available. The web-based application allows authorized users to distribute image and text content to displays at specific locations. The content may also be scheduled in advance.
- The CMS includes content modules to display bus arrival times, transit alert data, ad-hoc or PSA messages, and graphics.

DIAGNOSTICS

Status display indicates if there is a fault, so that maintenance can be quickly dispatched to the correct location.

The screenshot shows the PaCIM DPL Commander Monitor interface. On the left, a table lists device status:

Device ID	Device name	Node	Operating mode	State
DEM07	C07 Plano	PLANO	DISPLAY	not connected
DEM08	C08 AVT	PLANO	DISPLAY	normal
DEM09	C09 Test unit	PLANO	DISPLAY	normal
EINK01	E01	PLANO	DISPLAY	not connected
EINK02	E02	PLANO	DISPLAY	normal
EINK03	E03 Alexandria	ALEXANDRIA	DISPLAY	no data
EINK04	E04	ALEXANDRIA	DISPLAY	not connected
EINK05	E05-7Corners TC	BOTHELL	DISPLAY	no data
EINK06	AVT - 100123789 A12	BOTHELL	DISPLAY	normal
EINK07	AVT - 3000 E07	PLANO	DISPLAY	normal

On the right sidebar, there is a section for 'AVT - 3000 E07' with an 'Update display' button. Below it is a 'STOP #2900' section showing a list of routes and arrival times:

ROUTE	NEXT
2	N HIGH ST & W BROAD ST 2 min
2	N HIGH ST & W BROAD ST 3 min
1	N HIGH ST & W BROAD ST 8 min
1	N HIGH ST & W BROAD ST 21 min

ARRIVALS

Allows for the presentation of real-time arrivals. The format of the display of vehicle arrival information is the route number, the route destination, and a time to arrival in either minutes or time of day. In the event the displays are not able to obtain real-time arrival data the system will display scheduled arrival times.

The screenshot shows the PaCIM DPL Commander Monitor interface in 'Map view'. On the left, a filter menu shows 'Route 500' and a list of routes including '5536-M L KING JR', '5537-HIGHLAND', '5534-DOWNTOWN STA', '5535 - PLAZA SALTILLO', 'BI-5535 - PLAZA SALTILLO', 'BI-5536-M L KING JR', '5536-M L KING JR', '5542-LEANDER STATION', '5537-HIGHLAND', '5535 - PLAZA SALTILLO', '5536-M L KING JR', '5542-LEANDER STATION', '5538-CRESTVIEW', '5542-LEANDER STATION', '5541-LAKELINE', '5539-KRAMER', '5539-KRAMER', '5534-DOWNTOWN STA', '5540-HOWARD', '5536-M L KING JR', '5540-HOWARD', and '5539-KRAMER'. The main area is a map showing bus locations with icons and labels like '5536-M L KING JR', '5537-HIGHLAND', '5534-DOWNTOWN STA', '5535 - PLAZA SALTILLO', '5536-M L KING JR', '5542-LEANDER STATION', '5537-HIGHLAND', '5535 - PLAZA SALTILLO', '5536-M L KING JR', '5542-LEANDER STATION', '5538-CRESTVIEW', '5542-LEANDER STATION', '5541-LAKELINE', '5539-KRAMER', '5539-KRAMER', '5534-DOWNTOWN STA', '5540-HOWARD', '5536-M L KING JR', '5540-HOWARD', and '5539-KRAMER'. On the right sidebar, there is a section for 'COTA - 2900 E07' with an 'Update journeys' button. Below it is a table showing departure times, lines, destinations, and delays:

Departure	Line	Destination	Delay
17:54		N HIGH ST & W BROAD ST	
17:50		N HIGH ST & W BROAD ST	4
18:00		N HIGH ST & W BROAD ST	
18:00		N HIGH ST & W BROAD ST	1
18:00		N HIGH ST & W BROAD ST	2
18:10		N HIGH ST & W BROAD ST	1
18:10		N HIGH ST & W BROAD ST	1
18:14		N HIGH ST & W BROAD ST	

TRANSIT ALERTS

The transit alert module pulls transit alert data from a GTFS Alert or RSS feed and pushes specific information to each sign for display in the network.

PROVEN TECHNOLOGY, SUPERIOR VISIBILITY

Luminator Technology Group, the world leader in destination signs for transit buses, now offers E-paper displays for stationary applications. The displays use proven bistable reflective technology that provides superior visibility in direct sunlight, and low power consumption. Luminator's E-paper displays can be configured to operate on solar power and 4G/LTE cellular communications, eliminating costly construction and hard-wired installation.

EASILY PROVIDE REAL-TIME INFORMATION

Luminator's E-paper displays have the ability to display high-resolution images up to 2560 x 1440 pixels, making them ideal for graphics, arrival schedules and QR codes. The displays are managed via Luminator's content management software (CMS), providing the ability to monitor display status throughout the network, and update content on one or multiple displays as needed.

INTELLIGENCE, SAFETY AND EFFICIENCY IN TRANSIT

QUICK FACTS

- High resolution, multiple page views
- Reflective electrophoretic display technology operates with minimal energy consumption
- Optional text-to-speech functionality meets ADA requirements
- Requires no power or communication infrastructure; optional solar power

