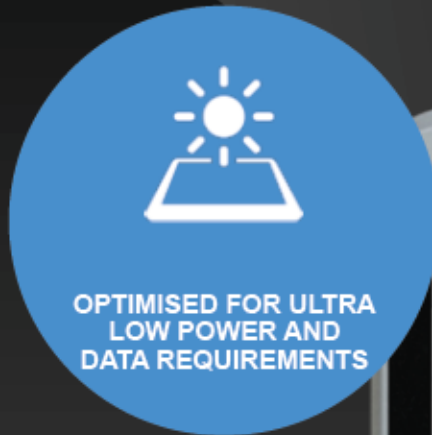




POWERING PASSENGER INFORMATION EVERYWHERE

A ground breaking digital bus stop passenger information solution using solar powered wireless e-paper displays

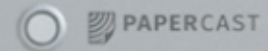


OPTIMISED FOR ULTRA LOW POWER AND DATA REQUIREMENTS



Working with you to improve customer experience and overall utilisation of public transport by keeping passengers more reliably informed.

www.papercast.com



logicworks

Looking for a cost-effective
and easy to implement
digital RTPI solution for your
bus stops?

INTRODUCING PAPERCAST

Papercast is a leader in solar powered, wireless e-paper RTPI display systems. Our technology offers a distinctive combination of features, making the platform one of the most advanced solutions of its kind available on the market today.

We offer an extremely economical replacement for legacy electronic systems and traditional paper timetables, while providing the ideal technology platform for smart city public transport information solutions.

PRODUCT LINEUP



- | **Standalone version:**
Ready for installation with a fully adaptable mounting bracket for poles ranging 76-152mm in diameter
- | **Embeddable version:**
High IP rating protection requires no additional housing or connectors



SINGLE 13.3"

General	
Dimension (LxHxW)	511 x 274 x 59mm
Weight	3.2 kg (7.1 lb)
Mounting type	Custom Pole clamp with security fixing.
Display	
Display resolution	1600 x 1200 pixels
Active display area	270 x 203 mm
Color	Grayscale (16 levels of gray)
Display type	Reflective
Illumination	Embedded LED front illumination, adjustable
Ambient light sensor	Optional
Connectivity	
Communication	Mobile network or WiFi or Ethernet
Mobile network	3G HSPA+ (CDMA optional)
Mobile network antenna	Internal (External antenna optional)
WiFi (optional)	Dual band (2.4/5 GHz) 802.11 ac/b/g/n
WiFi antenna (optional)	Internal
Ethernet (optional)	10/100/1000 Mbps
Electrical	
Power supply	12 V DC (from AC Mains via power supply) or 12 V DC Solar panel
Power consumption (1 min data update)	80 mA (without illumination) 120 mA (illuminated) Support for full shutdown with timer
Power supply connector	Male 5-pin circular waterproof
Environment	
Operating temperature	0° C to +50° C (32 ° F to +122 ° F) – Grayscale -20° C to +70° C (-4 ° F to +158 ° F) – B/W
Protection	IP65



DOUBLE 13.3"

General	
Dimension (LxHxW)	798 x 274 x 59mm
Weight	6.1 kg (19.5 lb)
Mounting type	Custom Pole clamp with security fixing.
Display	
Display resolution	3200 x 1200 pixels
Active display area	540 x 203 mm
Color	Grayscale (16 levels of gray)
Display type	Reflective
Illumination	Embedded LED front illumination, adjustable
Ambient light sensor	Optional
Connectivity	
Communication	Mobile network or WiFi or Ethernet
Mobile network	3G HSPA+ (CDMA optional)
Mobile network antenna	Internal (External antenna optional)
WiFi (optional)	Dual band (2.4/5 GHz) 802.11 ac/b/g/n
WiFi antenna (optional)	Internal
Ethernet (optional)	10/100/1000 Mbps
Electrical	
Power supply	12 V DC (from AC Mains via power supply) or 12 V DC Solar panel
Power consumption (1 min data update)	80 mA (without illumination) 160 mA (illuminated) Support for full shutdown with timer
Power supply connector	Male 5-pin circular waterproof
Environment	
Operating temperature	0°C to +50°C (32 °F to +122 °F) – Grayscale -20°C to +70°C (-4 °F to +158 °F) – B/W
Protection	IP65




logicworks
TECNOLOGIAS DE INFORMÁTICA

 **PAPERCAS**

TRIPLE 13.3"

General	
Dimension (LxHxW)	1,086 x 274 x 59 mm
Weight	9.0 kg (28.7 lb)
Mounting type	Custom Pole clamp with security fixing
Display	
Display resolution	4800 x 1200 pixels
Active display area	810 x 203 mm
Color	Grayscale (16 levels of gray)
Display type	Reflective
Illumination	Embedded LED front illumination, adjustable
Ambient light sensor	Optional
Connectivity	
Communication	Mobile network or WiFi or Ethernet
Mobile network	3G HSPA+ (CDMA optional)
Mobile network antenna	Internal (External antenna optional)
WiFi (optional)	Dual band (2.4/5 GHz) 802.11 ac/b/g/n
WiFi antenna (optional)	Internal
Ethernet (optional)	10/100/1000 Mbps
Electrical	
Power supply	12 V DC (from AC Mains via power supply) or 12 V DC Solar panel
Power consumption (1 min data update)	80 mA (without illumination) 200 mA (illuminated) Support for full shutdown with timer
Power supply connector	Male 5-pin circular waterproof
Environment	
Operating temperature	0° C to +50° C (32 °F to +122 °F) – Grayscale -20° C to +70° C (-4 °F to +158 °F) – B/W
Protection	IP65



32" B&W AND COLOR

General	
Dimension (L×H×W)	760 × 460 × 50 mm
Weight	15 kg (44.1 lb)
Mounting type	Embedded (VESA 200 M8)
Display	
Display resolution	2560×1440 pixels (Grayscale) or 1280×720 pixel (Color)
Active display area	690 × 390 mm
Color	Grayscale (16 levels of gray) or Color (4 bit levels for each RGBW channel)
Display type	Reflective
Illumination	Embedded LED front illumination, adjustable
Ambient light sensor	Optional
Connectivity	
Communication	Mobile network or WiFi or Ethernet
Mobile network	3G HSPA+ (CDMA optional)
Mobile network antenna	Internal (External antenna optional)
WiFi (optional)	Dual band (2.4/5 GHz) 802.11 ac/b/g/n
WiFi antenna (optional)	Internal
Ethernet (optional)	10/100/1000 Mbps
Electrical	
Power supply	12 V DC (from AC Mains via power supply) or 12 V DC Solar panel
Power consumption (1 min data update)	100 mA (without illumination) 180 mA (illuminated) Support for full shutdown with timer
Power supply connector	Male 5-pin circular waterproof
Ethernet connector	Ethernet circular waterproof
Environment	
Operating temperature	0°C to +50°C (32 °F to +122 °F) – Grayscale -20°C to +70°C (-4 °F to +158 °F) – B/W
Protection	IP65



ELECTRONIC DESTINATION SIDE DISPLAY



32" e-paper version

102

Mei Foo

NEXT BUS



4 min

⚠️ CLOSED FOR ROADWORKS

- ⓪ Kornhill Plaza 3 min
- ⚠️ Metropole Bdg no stop
- ⓪ Cannon Street 17 min
- ⓪ Maple Street 23 min

2x horizontal 13" e-paper version

102

Mei Foo

NEXT BUS

4 min



⚠️ ROUTE DELAYED

- ⓪ Kornhill Plaza 3 min
- ⓪ Metropole Bdg 8 min
- ⓪ Cannon Street 17 min
- ⓪ Maple Street 23 min

IN TESTING – 42”

- | Product still in small volume production testing
- | Mass production available in 2018

Park Garden 233212 15°C 12:21

Warning: Bus services to skip bus stops due to road works; affecting stops Avalon Rd, Desert Inn Rd and Clark Ave.

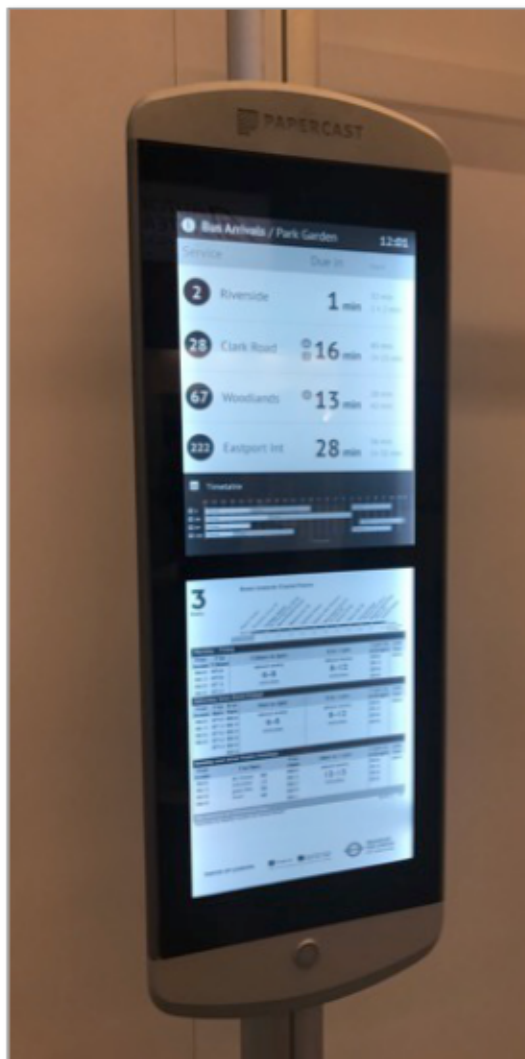
Next buses	Destination
2 4 min	Riverside
67 19 min	Clark Road
28 16 min	Woodlands

Bus Frequency

MON	TUE	WED	THU	FRI
15°	16°	18°	18°	17°

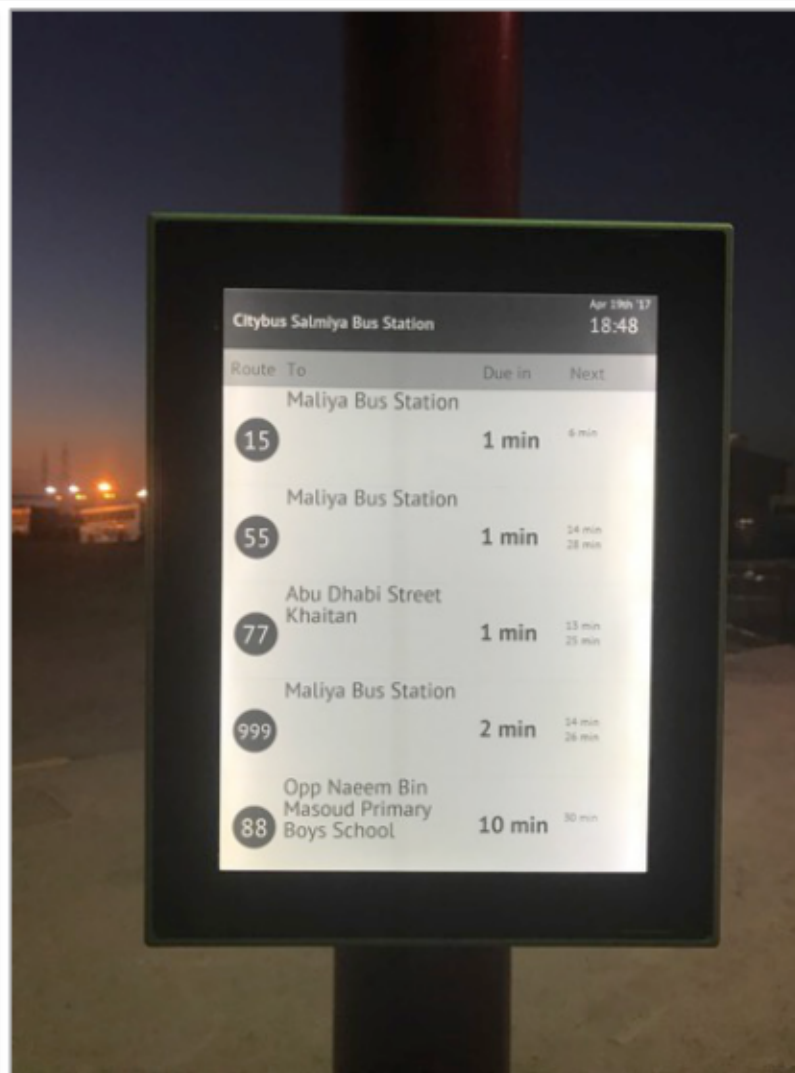
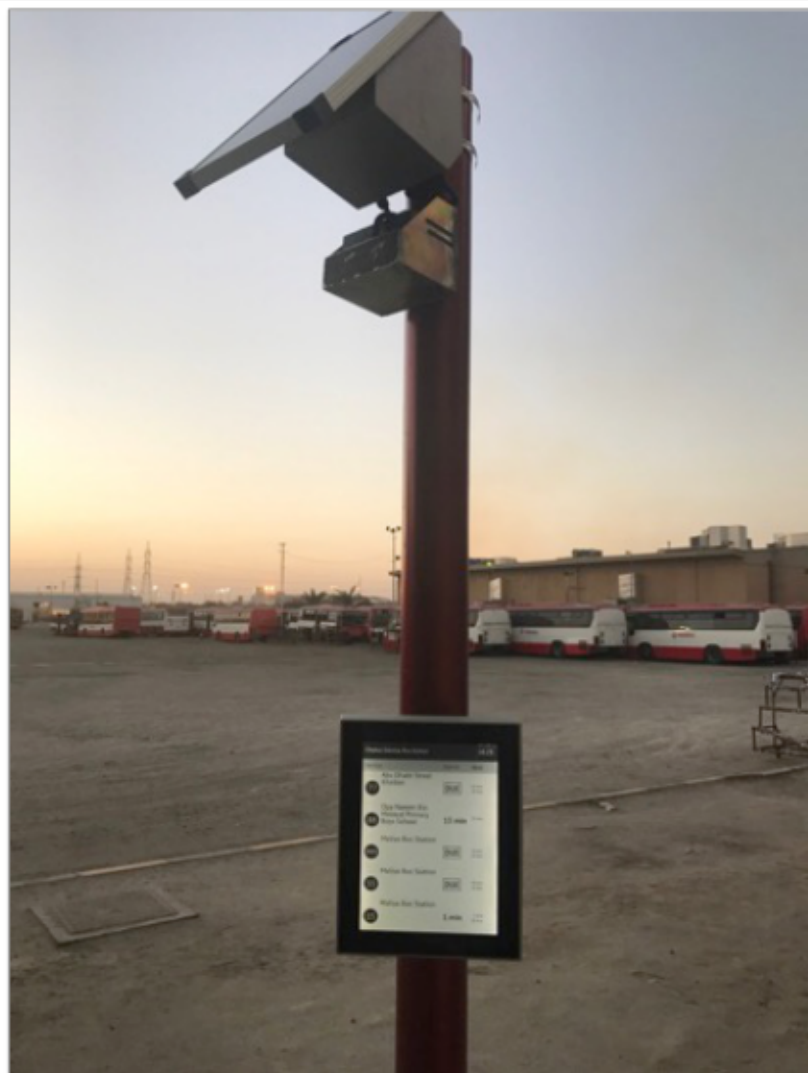
Upcoming Weather

USE CASES



BERLIN







AUSTRIA

Tannheim, Austria



Pisek, Czech Republic



Pittsburgh, US





PAPERCAST MANAGEMENT SYSTEM

Transit system

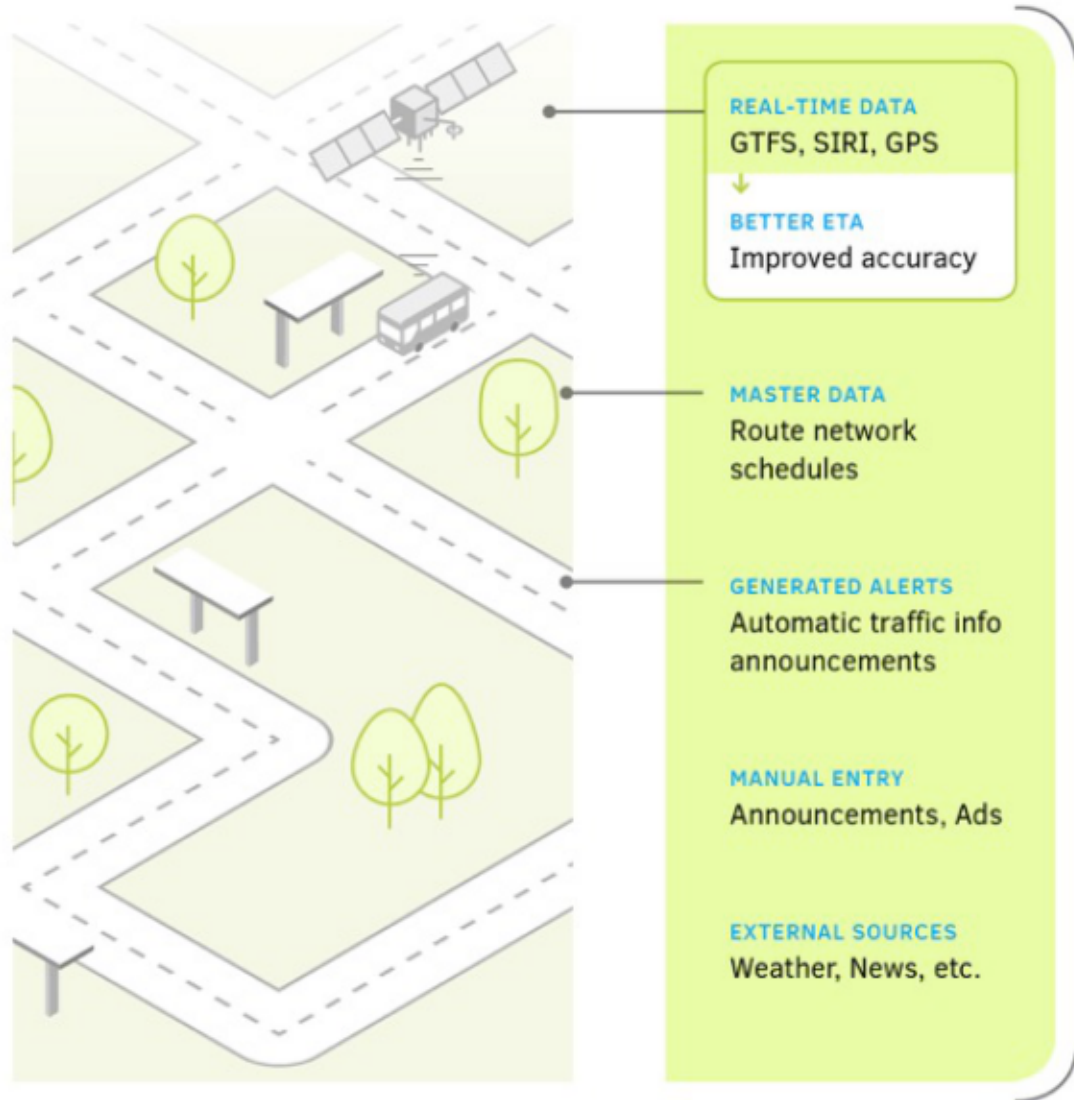
NETWORK & SERVICE PERFORMANCE

Control center

CONTENT MANAGEMENT

Bus stop

WITH PAPERCAST DISPLAY



Design & Configure

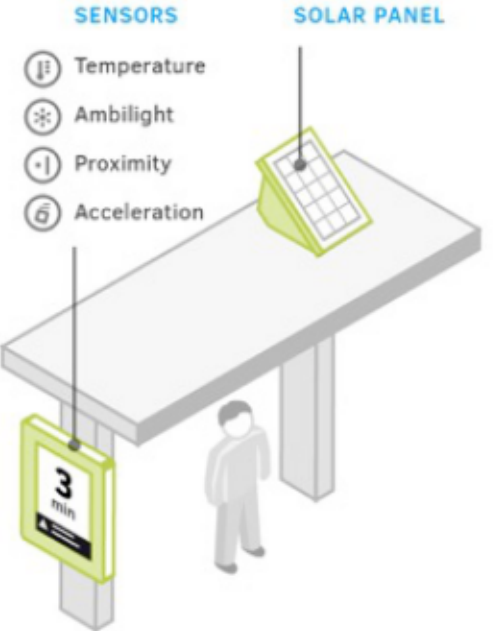
Apps, widgets, layouts



CONTENT SYNC



MONITORING &
REPORTING



Displays

Time, Location, Type & Configuration,
States & conditions (Sensor data)

Advanced Management

- Papercast displays are managed via a bespoke cloud-based management system.
- Designed for easy system integration, built on an open development platform, supporting standards such as GTFS and SIRI.
- Offers complete control over content design and presentation with a broad range of predefined apps and widgets, users can also build and integrate their own apps.
- Monitoring and management of all display features, including connectivity, local image rendering, system power management, auto-diagnostics, movement detection, solar charging and external sensors.



Advanced Management

- Papercast displays are managed via a bespoke cloud-based management system.
- Designed for easy system integration, built on an open development platform, supporting standards such as GTFS and SIRI.
- Offers complete control over content design and presentation with a broad range of predefined apps and widgets, users can also build and integrate their own apps.
- Monitoring and management of all display features, including connectivity, local image rendering, system power management, auto-diagnostics, movement detection, solar charging and external sensors.






in   
www.papercast.com

POWERED BY

E Ink

EPSON

 Microsoft Azure

NXP

13.3" display panel designs (B&W)

Standard design – realtime + headway

Bus Arrivals / Park Garden 12:04

Service	Due in	Next
2 Riverside	29 min	59 min 1 h 29 min
28 Clark Road	13 min	42 min 1 h 12 min
67 Woodlands	10 min	25 min 39 min
222 Eastport Int	25 min	53 min 1 h 28 min

Timetable

Bus Arrivals / Park Garden 12:01

Bus services to skip bus stops due to Thaipusam 2015; affecting stops 64, 123, 139, 143 on Clemenceau Ave.

Service	Due in	Next
2 Riverside	1 min	32 min 1 h 2 min
28 Clark Road	16 min	45 min 1 h 15 min
67 Woodlands	13 min	28 min 42 min
222 Eastport Int	28 min	56 min 1 h 32 min

Timetable

Flag pole design
High visibility

N14	9 min
328	
E84	15 min
34	45 min

N14	6 min
328	9 min
E84	12 min
34	42 min

N14	3 min
328	6 min
E84	9 min
34	39 min

Bus service 34 to skip stops on Clark Road due to Spring Festival closure.

13.3" display panel designs (B&W)

Multi-screen setup

- Top screen (real-time data)
- Bottom screens presenting schedule, line diagram and other information

הלוחמים/תל גיבורים 36394

Arriving in	Destination	Line
1 min	ופי ביבא לת	50
9 min	וניצל נושאר	84
13 min	ופי ביבא לת	7
28 min	ופי ביבא לת	4
29 min	ולוח	26

ENG Info Route

הלוחמים/תל גיבורים 36394

26 ופי ביבא לת

Route: 145 - 20 - 84 - 4 - 7 - 26

ENG Info Arrivals

הלוחמים/תל גיבורים 36394

Message Title

Lorem ipsum ut quunt litionest derunt perestis ea si natur reiciliqui cus et que etumquam illuptate qui ut reius volor aliqua cum dit volestem facieniet volor sit voluptas accum que adia qui commimintus dolut ventota quas adio. Nam aut quati volorum aut aliquaesti volluptat dolorem qui as ea alitas re moluptis nos eosanditae nonsequ idesten dessinc ipsanis nem qui consedis maximen isquis esed el ilia si voluptaquos restrum, est qui consequ esciae volo.

Info: Other - Contacts - Map - Fares

ENG Route Arrivals

Bus Arrivals / Park Garden 12:01

Service	Due in	Next
2 Riverside	1 min	32 min 1 h 2 min
28 Clark Road	16 min	45 min 1 h 15 min
67 Woodlands	13 min	28 min 42 min
222 Eastport Int	28 min	56 min 1 h 32 min

Timetable

Buses to Tottenham Court Road Station and beyond

24 176

29

You are here

Trafalgar Square/ Charing Cross Station

Tottenham Court Road Station

222

29

Transport for London

Travel information

To find out when your next bus is arriving

Visit tfl.gov.uk/buses

Follow us on Twitter @tflbusalerts

Or text your bus stop code to 87287

Look out for this sign on your bus stop for your code:

For next bus information

87287

For general travel information

tfl.gov.uk

24 hour travel information 0343 222 1234*

tfl.gov.uk/socialmedia

Ways to pay

oyster

Cash not accepted

MAYOR OF LONDON TRANSPORT FOR LONDON

32" display panel designs (B&W)

Service	Due in	Next
2 Riverside	1 min	32 min 1 h 2 min
28 Clark Road	16 min	45 min 1 h 15 min
67 Woodlands	13 min	28 min 42 min
222 Eastport Int	28 min	38 min 1 h 32 min
133 Angel Avenue	12 min	43 min 1 h 06 min
293 Mary Lane	4 min	22 min 1 h 02 min

Service	12	13	14	15	16	17	18	19	20	21	22	23	24	1	2	3	4	5	6	7	8	9	10	11	12
2 Riverside	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min
28 Clark Road	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min
67 Woodlands	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min
222 Eastport Int	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min
133 Angel Avenue	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min
293 Mary Lane	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min	15 min

Bus Arrivals Saint-Laurent / Saint-Antoine
☀️ 18°C 8:32

Next Bus

129-N Côte-Sainte-Catherin **15 min**

All routes

129-N Riverside	3 min 12 min 23 min	129-N Riverside	3 min 12 min 23 min
129-N Clark Road	3 min 12 min 23 min	129-N Clark Road	3 min 12 min 23 min
129-N Woodlands	3 min 12 min 23 min	129-N Woodlands	3 min 12 min 23 min
129-N Eastport Int	3 min 12 min 23 min	129-N Eastport Int	3 min 12 min 23 min
129-N W Spring Street	3 min 12 min 23 min	129-N W Spring Street	3 min 12 min 23 min

32" display panel designs (color)



Service	Due in	Next
2 Changi Village	1 min	32 min 1.2 min
28 Tampines Int	16 min	45 min 1.15 min
67 Tampines Int	13 min	28 min 42 min
222 Bedok Int	28 min	38 min 1.32 min
133 Royal Plaza Bvd.	12 min	43 min 1.06 min
293 Sentosa	4 min	22 min 1.02 min

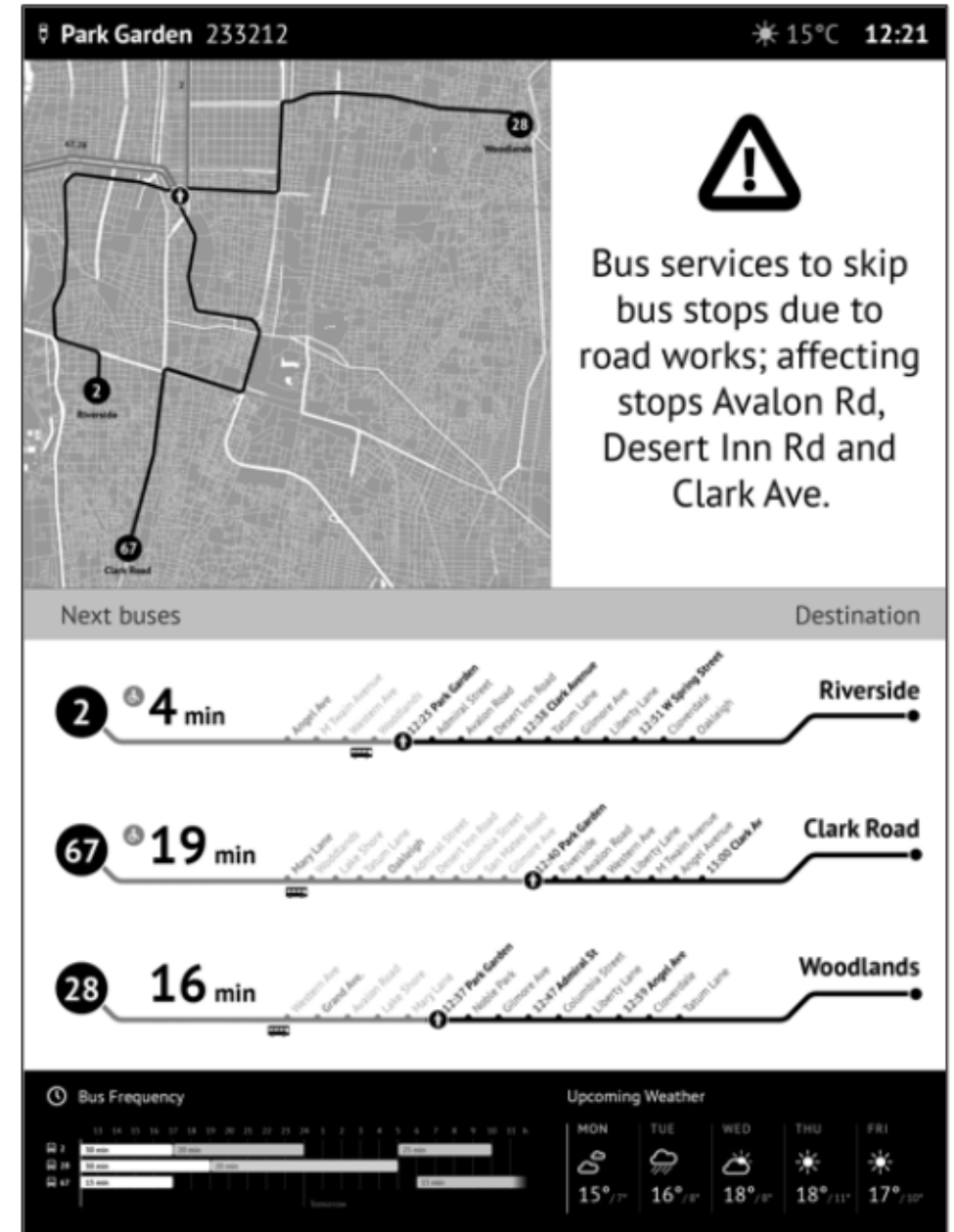
Service	Due in	Next
2 Changi Village	1 min	32 min 1.2 min
28 Tampines Int	16 min	45 min 1.15 min
67 Tampines Int	13 min	28 min 42 min
222 Bedok Int	28 min	38 min 1.32 min
133 Royal Plaza Bvd.	12 min	43 min 1.06 min
293 Sentosa	4 min	22 min 1.02 min

⚠ Bus services to skip bus stops due to Town Park Music Festival 2015; affecting stops 64, 123, 139, 143 on Clemenceau Ave.

Service	Due in	Next
2 Riverside	1 min	32 min 1.2 min
28 Clark Road	16 min	45 min 1.15 min
67 Woodlands	13 min	28 min 42 min
222 Eastport Int	28 min	38 min 1.32 min
133 Angel Avenue	12 min	43 min 1.06 min
293 Mary Lane	4 min	22 min 1.02 min

42" display panel design

Still in testing – not production version



In bus-displays

