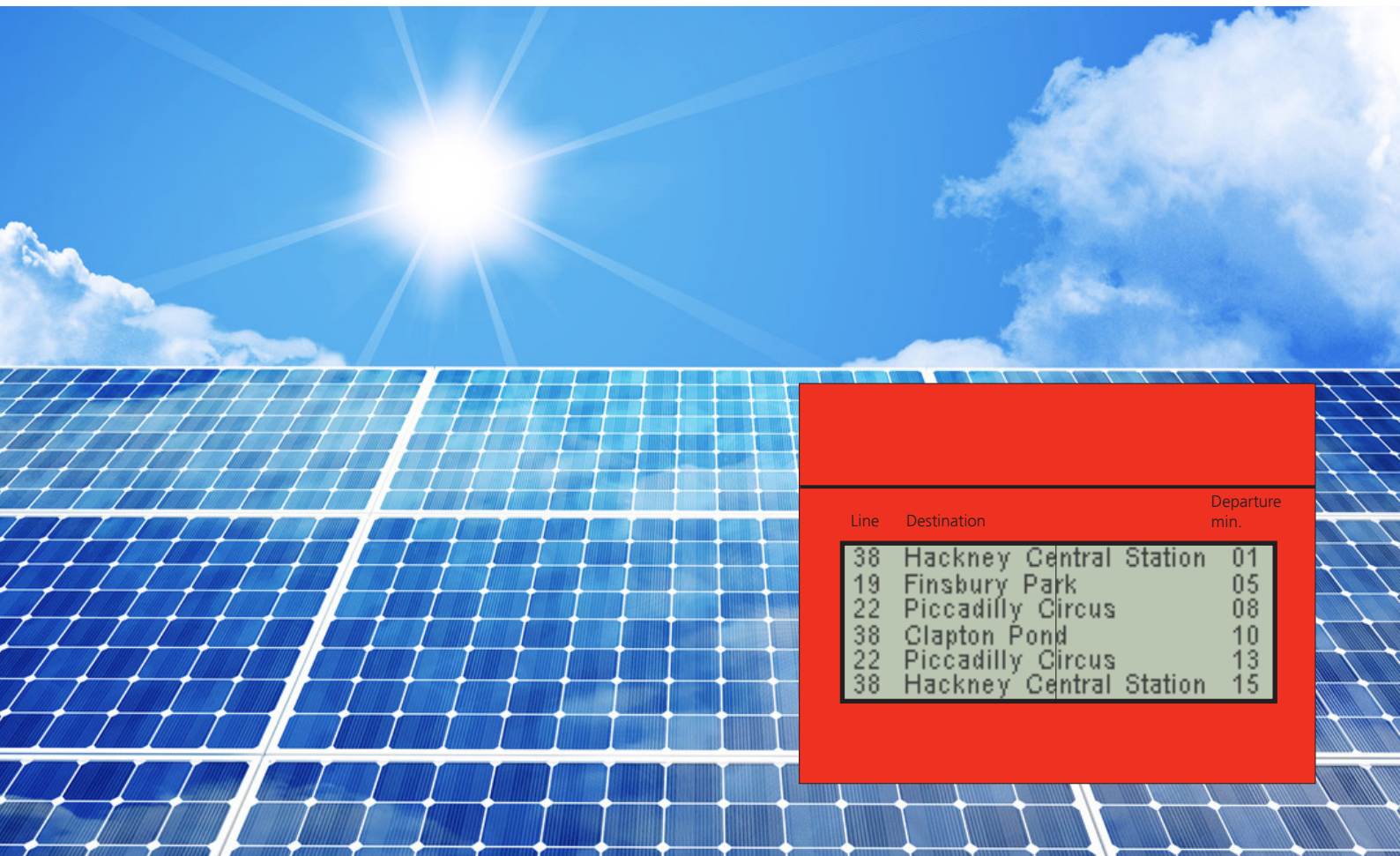


LCD screens for solar powered Passenger Information Systems



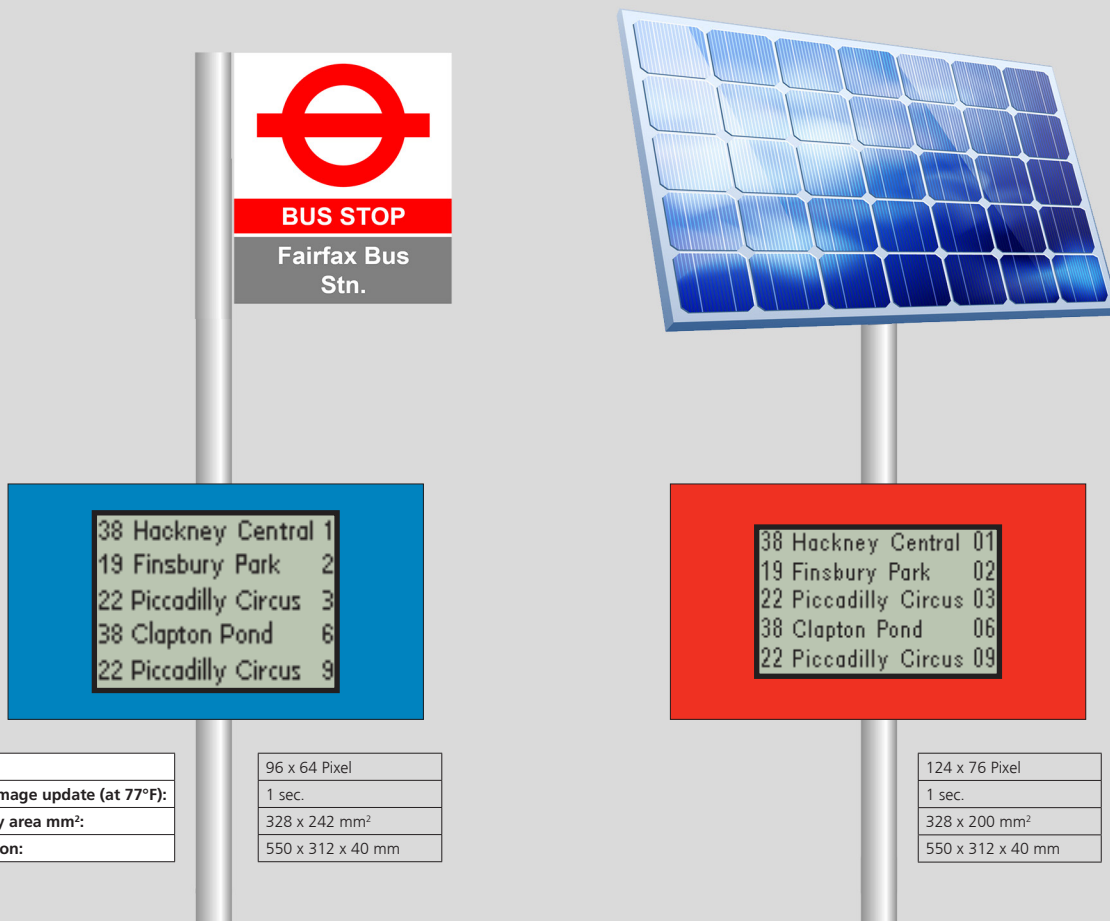
BMG MIS have designed these low-power LCD screens for operation as self-sufficient passenger information systems at small and medium sized public transport stations. They can be mounted to existing poles or walls and thus be integrated into existing steles, pillars, transit shelters or other street furniture.

With different pixel resolutions, sizes, colors and technologies, our customers can create an individual system dependent on their individual requirements.

Whether you choose a standard pixel resolution to display upcoming real time departures or a high pixel resolution to display more sophisticated graphics, due to their low power consumption our screens can all be operated in a solar powered system. Underground working and wiring is not necessary. Real time departure information is transmitted via the mobile telephony network, all LCD screens are equipped with a UMTS/GSM – modem.

Application

Self sufficient passenger information systems for public local transport.



Resolution:
Duration of image update (at 77°F):
Active display area mm²:
Case Dimension:

96 x 64 Pixel
1 sec.
328 x 242 mm²
550 x 312 x 40 mm

124 x 76 Pixel
1 sec.
328 x 200 mm²
550 x 312 x 40 mm

Geavision® REFLECTIVE ETN LCD SCREENS

Our Geavision® LCD screens are based on a standard ETN (enhanced twisted nematic) LCD technology and can be operated both in a purely reflective mode (during daytime) and in a transmissive mode (at night) using a low power backlight. Geavision® LCD screens offer ultra low power consumption and can be operated in a wide temperature range (-30°C to 70°C / -22°F to 158°F). Because of this, Geavision® LCD screens are very well suited for solar powered outdoor operation even under most challenging environmental conditions.

In order to obtain a larger viewing area, our LCD screens can all be clustered adjacent to each other. The inbuilt modem provides UMTS- and / or GSM-connectivity for different networks (UMTS 850 / 1900 MHz or 900/1800/2100M Hz, GPRS quad-band).

TECHNICAL SPECIFICATION

Display Technology:	ETN-LCD
Input Voltage:	2,7 - 5V DC
Backlight:	LED backlight, dimmable and switchable by motion sensor
Font colour:	Black on a light background or yellow on a dark background
Font and size:	Variable font sizes and graphics
Viewing Angle:	> 170 °
Temperature range:	-30°C to 70°C / -22°F to 158°F

Power consumption of LCD screen (including modem):

Connected standby mode	0,05 W (image remains visible)
Image update	0,2 W (takes milliseconds)
Data transfer	0,7 - 1 W

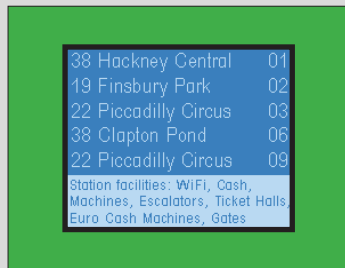
Power consumption of lighting:

0,3 W (Light is triggered by a motion sensor)

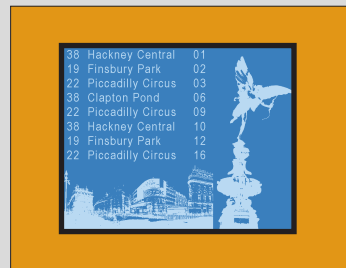
Control:	Integrated LCD controller for up to 4 LCD-screens, optimized for solar operation
Connection:	Modem with 2G / 3G

MECHANICAL PROPERTIES

Mounting options:	Mount to existing pole
Weight:	Approx. 6,5 kg



200 x 160 Pixel
1.5 sec.
307,5 x 246 mm ²
452 x 350 x 42 mm



800 x 640 Pixel
4 sec.
307,5 x 246 mm ²
452 x 350 x 42 mm

Geameleon® BISTABLE REFLECTIVE LCD SCREENS

The bistable Geameleon® LCD screens work purely reflective and offer a high pixel resolution combined with an ultra low power consumption. The latter makes them fit perfectly into any solar powered environment. Moreover, Geameleon® LCD screens can be operated in a wide temperature range (-20°C to 80°C / -4°F to 176°F), which makes them perfect for outdoor operation even under most challenging environmental conditions.

Geameleon® LCD screens are available in numerous different versions, in different sizes and with different pixel resolutions.

The standard display colours are black / yellow and blue / white (both monochrome). More colours can be realized upon request (e.g. black / green, black / orange, ...).

In order to obtain a larger viewing area, our LCD screens can all be clustered adjacent to each other.

TECHNICAL SPECIFICATION

Display technology: reflective ChLCD
 Input Voltage: 12V DC
 Lighting: LED Frontlight, dimmable and switchable by motion sensor

Font colour: Black / yellow and blue / white
 Font and size: Variable font sizes and graphics

Viewing Angle: > 170 °
 Temperature range: -20°C to 80°C / -4°F to 176°F

Power consumption of LCD screen (including modem):

OFF mode 0 W (image remains visible)
 Standby mode 0,06 W
 Data transfer 0,7 W
 Image update 1,5 W

Power consumption of lighting:

0,3 W (Light is triggered by a motion sensor)

Control: Integrated LCD controller for up to 2 LCD-screens, optimized for solar operation
 Connection: Modem with 2G / 3G

MECHANICAL PROPERTIES

Mounting options: Mount to existing pole
 Weight: Approx. 7,2 kg

Weitere Informationen und technische Datenblätter erhalten Sie von unserem Vertriebsteam.
 For more information and technical data sheets please contact our sales team.

Technische Änderungen und Irrtümer vorbehalten.
 Subject to technical modifications; errors excepted.



PASSENGER INFORMATION SYSTEMS

Keeping your passengers informed

FROM DOOR TO DOOR ...

... including a continuous flow of information. This is our mission in local and long-distance public transport.

With our information systems, we want to assist millions of people in their daily travels. By informing them, in a timely manner, with good travel information before and during their journeys on public transport systems.

To be able to ensure the availability of this information on a daily basis, we, as the general contractor, have made a competent team of experts available to our clients. These experts are responsible for the project management, design, development, production, installation and commissioning of information systems. Our extensive experience in the realisation of numerous information systems is the guarantee for a successful implementation of our client's projects, including such aspects as quality, timescales and meeting budgets. With our highly qualified employees,

we have the necessary infrastructure and flexibility for establishing a team of employees from all departments for a specific project, and with a 24-hour hotline we guarantee high-quality service and quick reaction times.

In a continuous dialogue with our clients, and at a state-of-the-art technical level, we develop individual, tailored solutions for information systems. Our systems solutions are adapted to accommodate existing procedures and requirements, including ITCS (Intermodal Transport Control System) systems or display systems at local stops etc.

With our systems solutions, we have the key to providing passengers continuously and door-to-door, with the up-to-date information that they need at all stages of their daily travels. This makes it possible for public transport operators to offer a seamless flow of information to their passengers, including guaranteed crosstransport connections.

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