



## Quality LED Outdoor Business Communication



**ALPHA**<sup>TM</sup> **Solar**<sup>TM</sup>



## Get the message.

### Inform

The ALPHA™ Solar™ line of electronic message displays provides a versatile way to instantly inform and communicate. Your audience can be guided... educated... even motivated. Solar outdoor technology is ideal for a wide range of applications from passenger information in airports/train stations and advertising in retail establishments, to customer information at bank drive-thrus and employee communications at plant/company entrances.

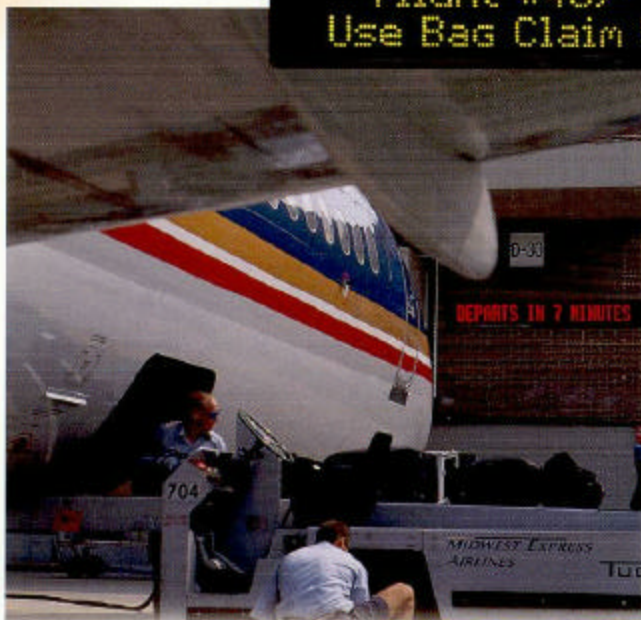
### Attract

Solar's bright, sunlight-readable, large 7-inch characters provide a powerful 350 ft. viewing distance for maximum visibility and impact. In addition, your messages can be displayed in two lines of 3-inch characters to greatly increase the amount of information visible at one time. With Solar you get clear, crisp, red or amber colored messages. Instant "on" and "off" operation of LEDs eliminates the "blurriness" typically found with incandescent signs.

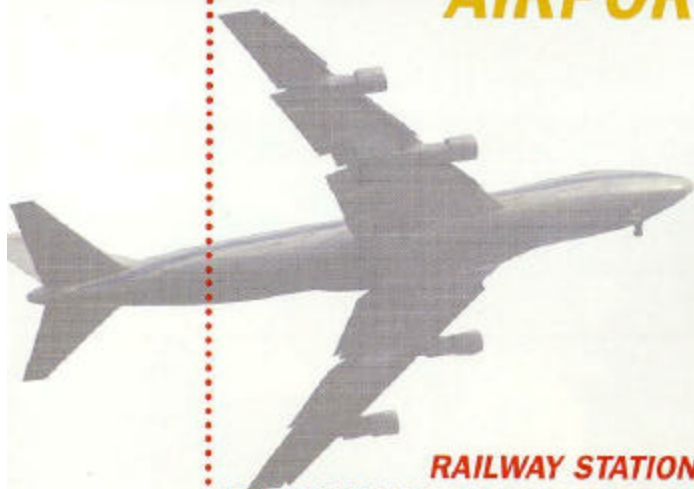
Solar displays also attract attention with time and temperature information.



Flight #407  
Use Bag Claim 5



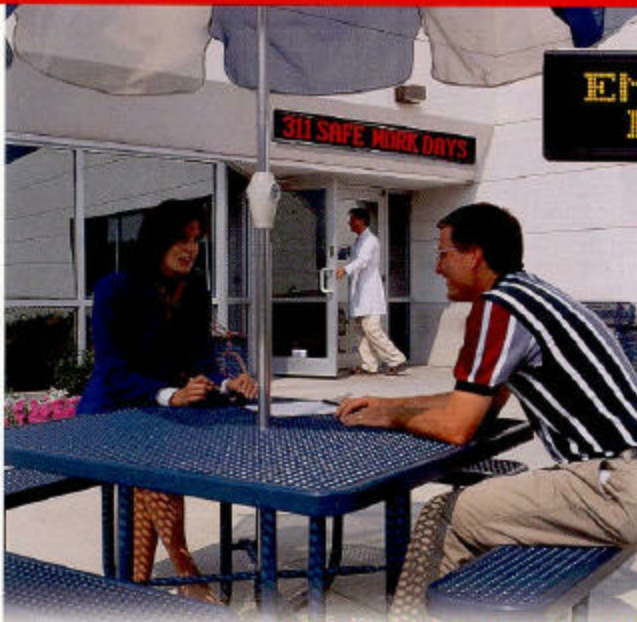
## AIRPORTS



## RAILWAY STATIONS



TRAIN 47 ON-TIME



**EMPLOYEE ID  
REQUIRED**

**EMPLOYEE  
COMMUNICATION**

**EMPLOYEE ENTRANCES**

**Advertise**

Are you looking for a way to stand out from your competition and increase sales volume? Do you want to significantly improve your company's image and product recognition? Used in support of other media programs, the Solar display will reinforce your advertising and promotional programs. Plus, you can develop specially targeted in-store campaigns that enhance your competitive position. Dollar for dollar, you get more impact – and at a lower cost than advertising with other media.

**Special Features**

- Energy efficient – consumes less power than incandescent signs (up to 90% less for comparable sizes)
- Long LED life – typical 100,000 hours as compared to 3,000 to 5,000 hours for many incandescent bulbs
- Reduced maintenance costs – relamping not required
- Bright – typical 3000 mcd rated LEDs (red or amber)
- Unique patented louver design enhances readability in sunlight
- Several different lengths available
- Fully cased and ready for installation
- Programmable via personal computer or from a portable, hand-held IR keyboard



**RETAIL**

**Special Lunch Buffet  
at the TASTY HOUSE !**



**BANK  
DRIVE-THRU**

**INVEST in a CD !**

## The ALPHA™ Solar™ Outdoor Electronic Display is Suitable for a Wide Range of Applications:

### Train Stations

- Display arrival/departure schedules
- Highlight platform and train numbers
- Display ticket information
- Satisfy ADA requirements
- Display paging information

### Bus Stations

- Display arrival/departure schedules
- List routing information
- Display ticket information

### Airports

- Display flight schedules
- Provide check-in and gate information
- Display baggage claim information
- Provide ramp information

### Parking

- Direct vehicles to available parking areas/levels
- Display parking rate information
- Direct vehicles to proper exits
- Direct people to have money/ticket ready

### Car Rental

- Direct VIP/express customers to car stalls

### Bank Drive-Thru

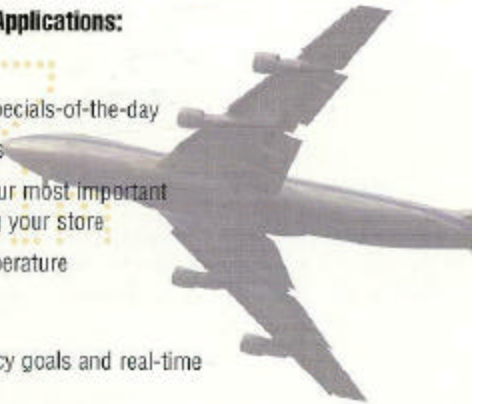
- Direct customers to available tellers
- Promote/cross-sell other financial products and services
- Increase customer awareness and sales
- Display accurate time and temperature
- Reduce perceived wait time

### Retail Advertising

- Advertise sales and specials-of-the-day
- Promote your services
- Communicate with your most important market: traffic passing your store
- Display time and temperature

### Employee Entrances

- Communicate efficiency goals and real-time production counts
- Display the number of "safe work days"
- Provide motivational messages
- Communicate important employee information (401K, health insurance policies, etc.)
- Provide personnel updates (promotions, transfers, new employees/job responsibilities, birthdays, work anniversaries, and more)



PERSONNEL  
INFORMATION



**MASS TRANSIT**

# ALPHA<sup>TM</sup>Solar<sup>TM</sup>

## OUTDOOR MESSAGE DISPLAY SPECIFICATIONS

Sizes	96 x 16	128 x 16 Pixels	160 x 16 Pixels	192 x 16 Pixels
Case Dimensions: (With power supply)	49.7"L x 7.4"D x 12.5"H (126.2 cmL x 18.8 cmD x 31.8 cmH)	64.1"L x 7.4"D x 12.5"H (162.8 cmL x 18.8 cmD x 31.8 cmH)	78.5"L x 7.4"D x 12.5"H (199.4 cmL x 18.8 cmD x 31.8 cmH)	92.9"L x 7.4"D x 12.5"H (236.0 cmL x 18.8 cmD x 31.8 cmH)
Approximate Weight:	57 lbs. (25.9 kg.)	66 lbs. (30 kg.)	76 lbs. (34.5 kg.)	85 lbs. (38.6 kg.)
Display Dimensions:	43.2"L x 7.2"H (109.7 cmL x 18.3 cmH)	57.6"L x 7.2"H (146.3 cmL x 18.3 cmH)	72"L x 7.2"H (182.9 L x 18.3 cmH)	86.4"L x 7.2"H (219.5 L x 18.3 cmH)
Display Array	16 rows x 96 columns	16 rows x 128 columns	16 rows x 160 columns	16 rows x 192 columns
Characters Displayed in Two-Line Format (slim width)	32 min. 38 typical 48 max.	42 min. 50 typical 64 max.	52 min. 64 typical 80 max.	64 min. 76 typical 96 max.
Characters Displayed in One-Line Format	10	14	17	21

Display Memory:	27,000 characters typical
Pixel Size (Diameter):	0.2" (5 mm)
Pixel (LED) Color:	Red version or Amber version available
Typical Forward	60,000 nits (candella per square meter)
Pixel Luminance:	Each pixel is rated 3000 mcd typical
Peak Wavelength:	Red = 654 nm Amber = 594 nm
Angle Viewing:	±30° (60° cone) sunlight readable ±3.5° (7° cone) to 50% of straight-on brightness
Center-to-Center Pixel Spacing (Pitch):	0.45" (1.14 cm)
Character Size (two-line format):	3.15" (8 cm)
Character Size (one-line format):	7.2" (18.3 cm)
Character Fonts:	6 fonts for 7.2" characters 8 fonts for 3.15" characters upper/lower case
Operating Temperature:	-20°C to 55°C; -4° F to 131°F (cold start)
Memory Retention:	One month typical
Message Capacity:	81 different messages can be stored and displayed
Message Operating Modes:	<ul style="list-style-type: none"> <li>- 25 consisting of: Automode, hold, inter- lock, roll (6 directions), rotate, sparkle-on, twinkle, spray-on, slide across, switch, wipe (6 directions), starburst, flash, snow, scroll</li> <li>- Continuous message entry with automatic centering in any mode</li> <li>- User programmable logos and graphics</li> <li>- Five variable speed controls</li> </ul>
Real-Time Clock:	Day and time, 12 or 24 hour format, maintains accurate time without power for up to 30 days typical
Temperature Display:	Optional remote temperature probe required
Serial Computer Interface:	RS232 and RS485 (multi-drop networking for up to 255 displays; 32 displays without repeater)

Special Features:	<ul style="list-style-type: none"> <li>- RS485 serial port</li> <li>- RS232 serial port</li> <li>- Infrared programmable (remote keyboard included)</li> <li>- Optional remote temperature sensing probe assembly</li> <li>- DIP switch selectable serial addressing</li> <li>- Internal AC power switch for servicing</li> <li>- Photocell dimming (customer adjustable)</li> <li>- Five levels of brightness control</li> <li>- Internal thermostatically controlled fans for cooling</li> <li>- Automatic overheating protection</li> <li>- Serially uploadable FLASH PROM memory</li> <li>- Serially programmable relay (contact rating: 3 amps @ 250VAC, 3 amps @ 30VDC)</li> </ul>
Communications:	ALPHA <sup>TM</sup> Communications Protocol compatibility
Power:	120 VAC ± 10% - 60 Hz (230 VAC model also available)
Power Consumption:	3.5 amp max.
Keyboard:	Handheld, Eurostyle, IR remote operated
Case Material:	Extruded aluminum, outdoor NEMA-style, tamper-resistant case
Lens Material:	Polycarbonate hard-coated lens
Limited Warranty:	One-year parts and labor, factory servicing
Agency Approvals:	<ul style="list-style-type: none"> <li>- 120 VAC model<sup>1</sup> - FCC - class A emissions</li> <li>- 230 VAC model<sup>1</sup> - CISPR 22B emissions</li> <li>- EN50082 - 1 using IEC 801-2,3,4 immunity certified to EN60950</li> <li>- <sup>1</sup>Both models - ETL listed to ANSI/UL1950 CAN/CSA 950 #22.2 M89</li> </ul>
Patent:	U.S. Pat. Des. 360,847
Standard Product	- ALPHA Solar Electronic Display
Packaging Includes:	<ul style="list-style-type: none"> <li>- IR Keyboard and Keyboard Programming Instructions</li> <li>- Wall Mounting Kit</li> <li>- Installation Instructions</li> </ul>