

# 46" Outdoor LCD GS4600HDP1



## OVERVIEW

Suntronic's GS product line, featuring innovative All-Weather Sunlight Readable LCD technology, provides the highest-quality Sunlight Readable image available in Out Door Environment. These Industrial grade Outdoor displays have the exemplary resolution and brightness you've come to expect from Suntronic. GS technology delivers stunning images for use in applications such as: Digital Signage, Ski Resorts, Retail/ Restaurants, Golf Course, Gas Stations, Shopping Malls, Restaurants and Outdoor

## WHY SUNTRONIC'S GS OUTDOOR LCD?

- ❖ All in one outdoor High Brightness All Weather outdoor LCD - Complete solution protect sunlight readable LCD in IP65/NEMA enclosures
- ❖ Outdoor use under direct Sunlight – Unique built in air conditioner design to keep unit working even in extreme conditions
- ❖ Touchscreen and Computer: Optional integration of Touch screen and PC capability
- ❖ Warranty: Backed by our WARRANTY and excellent customer service.

## FEATURES AND BENIFITS

**High Brightness & High Contrast LCD:** Offers superior readability under sunlight. High Brightness and contrast ratio assure excellent visibility even in bright outdoor environments.

**Auto Power on and Video signal on/off:** The LCD is always on whenever there is a power, this functionality eliminates the need to manual turn on the LCD. Also, you can control the LCD backlight on/off by video signal. LCD backlight will shut down when no video signal, but LCD backlight will wake up when the video signal is back on.

**Safety AR/ Solar Blocking Glass:** Vandal Resistant AR Glass decreased reflection makes image crystal clear, and they produce less glare. Also Block direct solar heat provide protection from UV rays.

**IP65/NEMA4X Vandal Resistant Enclosures:** will stand up to harsh, wet and dirty environments, Falling dirt, rain, sleet, snow, windblown dust, external ice formation, splashing water, hose-directed water

**Flexible Mounting Options** – Provide mounting M12 holes at the top, bottom and sides for different mounting application either wall mount, pole mount, ceiling mount where you will find GS will be user friendly to work with for

**Air Curtain** – a flow of air is constantly carried across the front between the glass and LCD. An air curtain prevents any damage to the screen caused by heat buildup in high temperatures or by continual direct sunlight. In colder



**Air conditioning & Heater** – For use in extreme temperatures, GS built in air conditioning inside the completely sealed NEMA4/IP65 Enclosures providing a perfectly sealed environment that is the optimum condition for the Operating

**Front Removable Glass:** Makes easier to remove and replace glass when it is damaged or scratched.

**Slick & Slim Bezel:** Ultra-thin bezel LCD Media Video wall system that delivers outstanding visual performance for Video Wall Tiling.

**Powder Coated Finish** – Epoxy polyester paint is electrostatically applied across the entire unit then oven baked to provide a smooth textured finish that is ideal for wet and corrosive environments – adheres to IP65 & NEMA 4

**Touch screen Kiosk** – Optional Stand turn GS to modern aesthetic quality interactive and information Kiosk promote interaction and functionality, it come with vertical (portrait) or Horizontal (Landscape) orientation.

## FEATURES AND BENEFITS

**Extra Interior Space** – To provide easier access and spacious for integrating single board PCs, digital media players, Cellular modem, CAT extender, Fiber optical extender.

**Modular Design** – Easy to remove and replace on major Modular Design electronic component and Air conditioner for saving time on troubling shooting and lower cost for field Service.

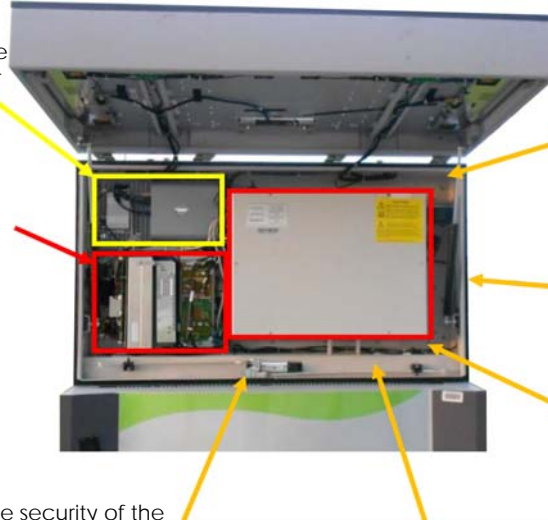
**KeyLock:** Ensure the security of the enclosures for unwanted access

**Built-in Waterproof Speakers** – 2 set of 5 Watts waterproof speakers enable sound to be integrated into the GS give you further levels of customer interactivity.

**Automatic Thermostatic Cut Off** – Automatic thermostat cut-off that will turn off the screen in excessively high temperatures to prevent screen damage - Ideal for areas where such extreme temperatures

**Closed Cell gasket** – Creates a waterproof and dustproof seal when the enclosure is closed preventing any ingress of water or moisture, as well as pass a hose-down test. – adheres to IP65 and

**25 mm insulation** – a 25 mm layer of closed-cell foam that contains a low-conductivity gas which is added to Suntronic enclosures that are bound for colder conditions. This reduces heat-loss and prevents ice crystals from forming inside the enclosure allowing the screen to be used in temperatures as low as -40F



## SPECIFICATIONS

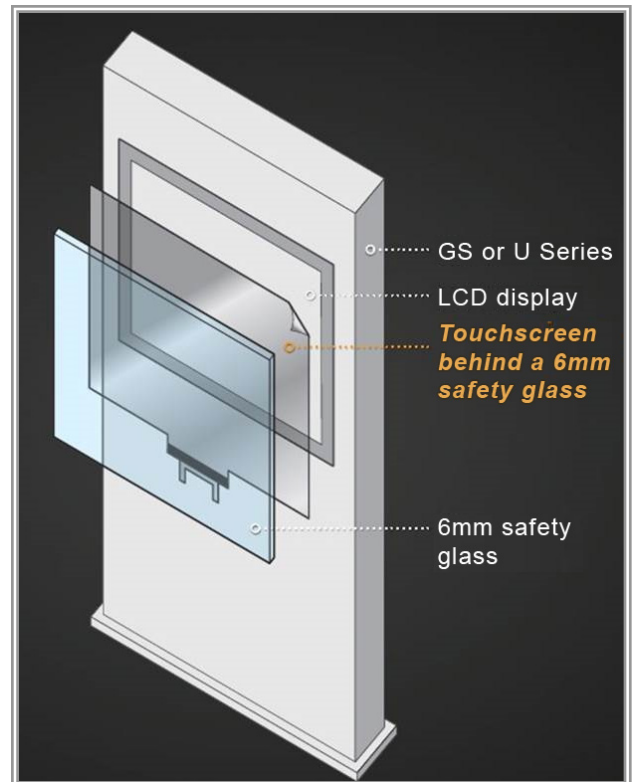
**Active area size (W x H):** 46" (1018.353 x 572.544 mm)  
**Pixel Pitch:** 0.2485(H) x 0.7455(V)  
**Panel resolution (pixels):** 1920 x 1080  
**Luminance of white (Brightness):** 1500 nits (Typ)  
**Contrast ratio:** 3000:1  
**Response time (gtg):** 8 ms (Typ)  
**Colour Range:** 16.7 Million colours (max)  
**Viewing angle:** 89/89/89/89  
**Video inputs:** VGA; HDMI; S-Video  
**Auto Brightness Control:** Yes (Optional)  
**Front glass type:** Strengthen 6mm AR glass  
**IP Class:** IP65  
**Operating temperature range:** -40 to + 95F (Direct Sunlight) /122F (Under Shaded Area)  
**Storage Temperature:** 0 to 50C  
**CCFL Life Time:** 60K hrs (min)  
**Input voltage:** 110V  
**Weight:** 70kg/195lbs  
**External dimensions (W x H x D):** 1056 x 610 x 249 mm Notes: to guarantee a proper functionality, 10cm of clearance must be kept around the display (41.6" W x 24" H x 9.81"D)  
**Landscape version:** Please contact SuntronicLCD for details  
**Available Accessories:** IR Remote Control and VGA cable (included) and Ethernet Cable (not included)  
**Options:** Custom Embedded PCs (please call for enquiries)  
**Customization:** Please contact SuntronicLCD for available options  
**Warranty:** One Year return to Depot Warranty

**\*\*Remarks:** L for Landscape and P for portrait

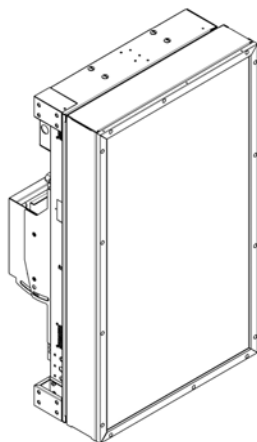
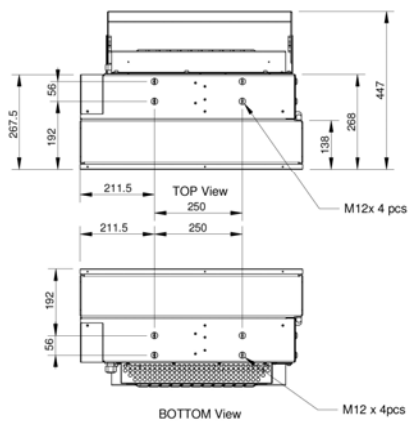
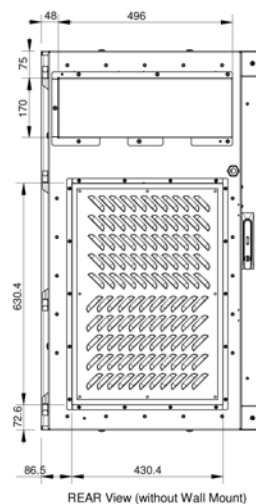
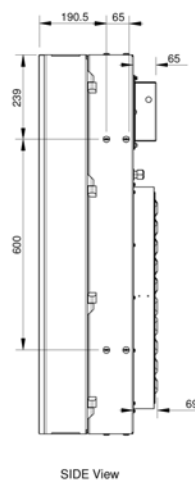
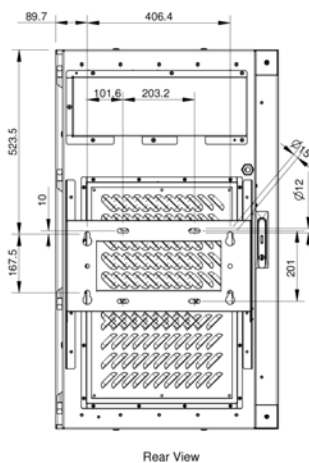
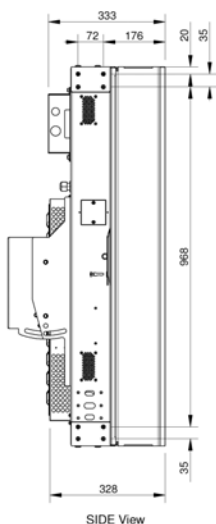
## GS and U Series Touch screen Options

Laminate the touch foil behind a safety glass the glass and integrate into our GS or U Series.

Fitting behind the glass to create a vandal and weather proof touch solution. Ideal for outside enclosures.







## LPC7050WT (Optional)



### Cable-free interior

The interior of this product contains no wires, making this industrial product as rugged as possible.

### Multiple display ports

This platform comes with multiple video-out ports to allow easy integration with any signage setup.

### Integrated SIM card reader

Integrated in a mini-PCIe slot, the SIM card readers allow for users to enable 3G use for their IPC.

### Intel® Atom™ N2800

Dual core Cedar Trail Intel Atom CPUs feature the 1.8 GHz N2800 which uses 6.5 Watts.

### Fanless

This IPCs lifespan has been extended by removing the most easily damaged component, the fan.

### Extreme operating temperature

This product is ruggedized to support a wider than usual range of temperatures. Outfitted with industrial components (HDD/SSD, CF, Memory) this appliance can thrive in harsh conditions.

### Dust proof design

Solid chassis design with a fanless interior allows for this product to be completely dustproof when installed correctly, insuring longevity of the product.

### Screw-locked power plug

This power plug is made to screw directly into the appliance chassis, allowing secure power connection in even the harshest of settings.

### LED indicators

LED indicators makes it easy to check working status.

## LPC7050WT SPECS:

<b>Dimensions (WxHxD)</b>		198x42x145mm (7.80" x1.65" x5.71")
<b>Processor</b>		Intel Atom N2800
<b>Chipset</b>		Intel NM10
<b>System Memory</b>	Technology	DDR3 SODIMM x1
	Max. Capacity	Up to 4GB
<b>Storage</b>	IDE	CF socket Type I/II x1
	SATA	2.5" SSD/HDD drive bay x1
<b>Ethernet Controller</b>		Intel 82574 x1: Intel 82583V x1
<b>Graphic Controller</b>		Intel Integrated Graphics Media Accelerator 3650
<b>Audio Controller</b>		RTL ALC886 x1
<b>I/O</b>	LAN	GbE RJ45 x2
	Display	DB15 x1 for VGA (1920x1200) DVI-D x1 (1920x1200)
	Video Grabber	N/A
	Audio	Phone Jack x2 for Mic-in and Line-Out
	Serial I/O	DB9 x2 supports RS232/422/485
	GPS	N/A
	USB 2.0	Type A x4
	Power Input	2-pin terminal block
	Expansion	Mini-PCIe x2 (one with SIM card reader)
	Others	External: Power-On Button, SMA Antenna Hole Internal: Reset
<b>Power Input</b>		+24Vdc +/-5% ATX Mode
<b>AC Adapter</b>		60W +24V @ 2.5A
<b>Hardware Monitor</b>		Fintek F81865F Integrated Watchdog Timer 1~255 level
<b>OS Support</b>		Linux XPE, XP Pro FES, WS7E, WS7P, Win 7 Pro FES
<b>Certifications</b>		CE, FCC Class A
<b>Compliance</b>		N/A
<b>Operating Temp. Range</b>	w/ Industrial Components	-20~55°C / -4~131°F
	w/ Commercial Components	-5~45°C / 23~113°F



## OUTDOOR ANTENNA (TRAB24003P)

**WHITE OR BLACK:** Our UHF and 800/900 MHz Phantoms are now available in either white or black ABS plastic. ABS plastic is highly shock resistant. Both can be painted to the color of your application by using a nonmetallic paint.

**WHIPLESS DESIGN:** The revolutionary patent pending whipless design of our Phantom™ antenna allows car washes without removing the antenna. Whipless means they don't look like antennas, attract less attention, less vandalism, and have lower wind resistance. Phantom. s™ are also less susceptible to be broken by trees and garages.

**FIELD DIVERSITY:** Field diversity means that the antenna is simultaneously sensitive to both the electric and magnetic fields of the signal, like having two antennas. Field diversity makes the antenna resistant to the picket-fence fading that is always found in urban operation.

**MEAN-EFFECTIVE-GAIN:** The radiation pattern of our Phantom™ antennas are specially tailored to aim the signals in the right direction for mobile operation by utilizing a low radiation angle and a broad beamwidth. When used in mobile operation, in urban or suburban areas, our phantom antennas have been proven to outperform any gain antenna.

**PERMANENT MOUNTING:** Permanent mount versions of the UHF and higher frequency models are available for those high risk applications such as metering where antennas must resist vandalism and achieve economical mounting.

### TRAB24003P

800/900 MHz 3 dB-MEG BLACK MODELS

Frequency Range = 2400-2500 MHz

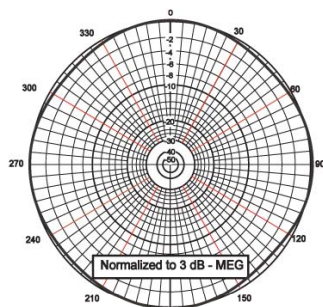
Radome height = 2.30"

Gain = 3 dB-MEG\*

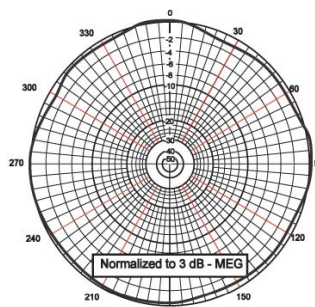


	VHF	220 MHz
<b>Gain:</b>	Unity	Unity
<b>Frequency Range:</b>	144-150 MHz 150-156 MHz 156-162 MHz	220-230 MHz
<b>VSWR:</b>	<1.5:1 850 kHz <2.0:1 1.5 MHz	<1.5:1 2.2 MHz <2.0:1 4.0 MHz
<b>Maximum Power:</b>	100 watts	100 watts
<b>Bandwidth:</b>	1.5 MHz	4 MHz
<b>Impedance:</b>	50 ohms	50 ohms
<b>Height:</b>	3½"	2½"

## Horizontal Field Patterns

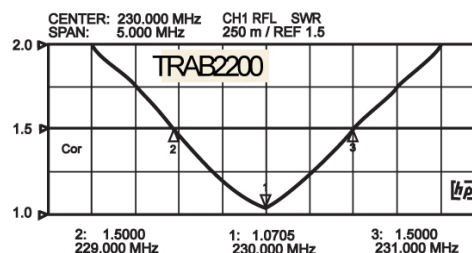
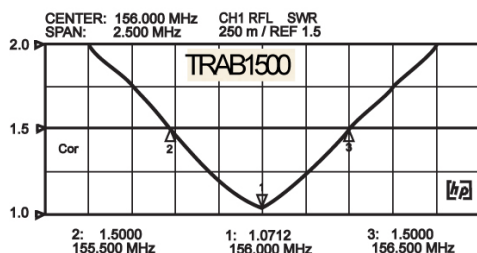


TRAB1500



TRAB2200

## VSWR



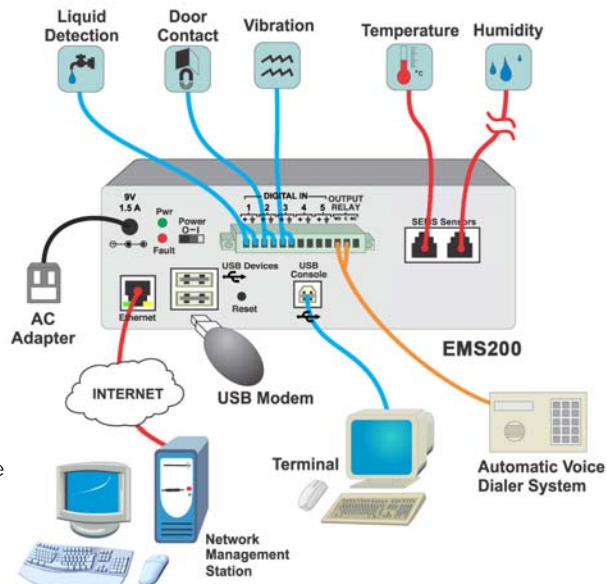


## EMS200 (Optional)

## Configuration and Cable Illustration



Mini Server Environment Monitoring System monitors critical environmental conditions (such as temperature, humidity, and water leakage) that could destroy network components in your server room. When a sensor goes out of range of a configurable threshold, the system will notify you via email, SNMP traps, web-page alerts, a visual indicator (red LED), voice phone calls (via Automatic Voice Dialer System), and SMS messages (via USB 3G modem). The system supports two temperature/humidity sensors, five digital input sensors, and one output relay.



## SPECIFICATIONS:

<b>Sensor Ports</b>	2 RJ45 jacks
<b>Digital Inputs</b>	5 screw terminal pairs
<b>Output Relay</b>	1 screw terminal pair; normally open / normally closed connection points
<b>USB Console Port</b>	One female USB Type B connector for terminal access
<b>Ethernet Port</b>	One 10/100 Base-T Ethernet port with RJ45 jack
<b>USB Ports</b>	2 female USB Type A connectors for connecting USB modem or for downloading log data to USB flash drive
<b>Alerts</b>	6 methods
Email	Authenticates
Web Page	Y
SNMP network management	Y
Front Panel LEDs	LEDs for sensors and power
Voice Phone Calls	Via Automatic Voice Dialer System (not included)
SMS Messages	Via external USB 3G modem (not included)
<b>Smart Alerts</b>	<ul style="list-style-type: none"> <li>Up to 50 sensor conditions (events) can be configured to trigger alerts by themselves</li> <li>Up to 20 Smart Alerts can be configured to use different event combinations to send alert messages</li> </ul>
<b>Control Methods</b>	4 methods
Web Interface	HTTP/HTTPS Supports up to 16 user accounts
Telnet	Y Two user levels: user and administrator
Network Operation (SNMP)	V1/V2c/V3
USB Serial Interface	Y Two user levels: user and administrator
<b>Monitor (Ping) IP Devices</b>	Up to 16 devices
<b>Protocols</b>	HTTP/HTTPS, SNMP V1/V2c/V3, SMTP, TCP/IP, Syslog, SNTP, DHCP, SSHv2, SSLv3, LDAPv3, AES 256-bit, 3DES, Blowfish, RSA, EDH-RSA, Arcfour, IPV6, WAP 2.0
<b>Flash Upgradeable</b>	Y
<b>Operating Temperature</b>	<ul style="list-style-type: none"> <li>EMS200: 32°F to 104°F (0°C to 40°C).</li> <li>EMS200-IND: 32°F to 167°F (0°C to 75°C).</li> </ul>
<b>Storage Temperature</b>	-20°F to 176°F (-20°C to 80°C).
<b>Operating &amp; Storage Relative</b>	17 to 90% non-condensing RH
<b>Power</b>	<ul style="list-style-type: none"> <li>110 or 220 VAC at 50 or 60 Hz via AC adapter</li> <li>Optional backup battery - provides backup power for two hours</li> </ul>
<b>Dimensions WxDxH (in)</b>	5.67x2.10x2.10
<b>Mounting</b>	Zero-RU Optional DIN rail mounting
<b>Regulatory Approvals</b>	CE, RoHS
<b>Warranty</b>	2 years

