

**READ AND STUDY MANUAL BEFORE USE**



**Suntec Industries (H.K.) Ltd.**

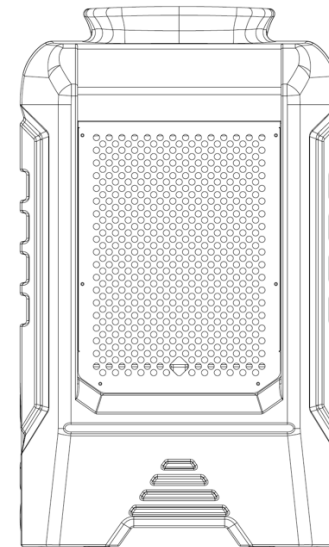
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**LGR Mobile Dehumidifier**  
**220~240V Model: ST600 / ST1000**

## **OPERATING MANUAL**



**DECLARATION OF CONFORMITY**

We, declare under sole responsibility that our models (ST600 and ST1000) to which this declaration relates are in conformity with the following standards:

**EMC:**

**EN 55014 - 1:2006, EN 55014-2:1997+A1:2001**

Electromagnetic Compatibility: emission requirement

**EN 61000 - 3 - 2:2006, EN 61000-3-3:1995+A1:2001+A2:2005**

Electromagnetic Compatibility: emission requirement.

**LVD:**

**EN 60335 - 1: 2002+A1:2004+A11:2004+A12:2006+A2:2006**

Safety of household and similar electrical appliance

- General requirements.

**EN 60335 - 2-40: 2003+A11:2004+A12:2005+A1:2006**

Particular requirements for electric heat pumps,  
air conditioners and dehumidifiers.

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**Design and Development**

## Specifications

Model	ST600	ST1000
Water Removal (32°C/90%RH)	138Pints / 65L per day	222Pints / 100L per day
Water Removal (27°C/60%RH)	83Pints / 39L per day	129Pints / 61L per day
Water Removal (10°C/70%RH)	32Pints / 15L per day	54Pints / 27L per day
Temp. Range	1° - 38° C	1° - 38° C
Compressor / Refrigerant	Rotary / 410A	Rotary / 410A
Power Consumption	920 Watt	1650 Watt
Voltage / Cycle	220-240V / 50Hz	220-240V / 50Hz
Ampere	4.0 Amps	6.5 Amps
Rated Air Flow	600 m <sup>3</sup> /h	750 m <sup>3</sup> /h
Control Panel	Touch-pad	Touch-pad
Timer Control	Yes	Yes
Defrost Type	Hot-gas bypass	Hot-gas bypass
Air Filter	Pleated Filter	Pleated Filter
Water Pump	Centrifugal	Centrifugal
Housing	Rotomolded	Rotomolded
Large Wheels	Semi-pneumatic	Semi-pneumatic
Drain Hose Length	10m	10m
Cable Length	8m	8m
Height	840mm	840mm
Width	500mm	500mm
Depth	485mm	485mm
Use Weight	40kg	50kg

Specifications are subject to change without notice. Some values are approximate.

Suntec ST Series dehumidifiers are used for professionals drying out wet materials such as carpets, carpet cushions, floors, walls, building contents and more. They reduce the water in enclosed structural environments like building or part of a building by removing water vapor from the air.

## Safety Instructions

- Do not allow children to play with or around the operating unit.
- Keep wiring and motor dry. Never operate the unit in standing water, rain and snow, as this may create a risk of injury from electric shock.
- Do not use the adaptor.
- Do not operate the unit with a damaged power cable.
- Always operate the unit with an earthed plug and with an earthed supply.
- Extension cables must be earthed and be able to deliver the appropriate voltage to the unit.
- Do not drop or throw the unit.
- Always operate the unit on a stable, level surface.
- Do not clog or block air intakes.
- Always to keep the filter clean.
- Do not attempt to disassemble or repair the unit if you are not qualified to do so.

## How to Use Dehumidifiers

### Setting Up a Drying Area

#### Create a closed drying chamber

The dehumidifier should be operated in an enclosed space, as this creates a drying chamber. Close all doors, windows or areas that open to the outside to maximize the unit's water removal efficiency. Inside the drying chamber, air should circulate freely. Open interior doors and turn on Air Movers to increase the circulation.

### **Position the dehumidifier**

Place the dehumidifiers in the center of a room and keep it away from anything that could prevent airflow into and out of the unit.

### **Managing the rising temperature**

The dehumidifier warms the air as it removes its moisture. Room temperatures of about 20°C to 29°C are usually a good condition for drying.

**CAUTION!** Never operate the Suntec ST Series dehumidifier at temperature above 38°C. It could damage the machine and building contents.

### **Operating Your Dehumidifier**

#### **Place the dehumidifiers in upright position**

If the dehumidifier has been in a horizontal position for any time over a few minutes, you must set it upright (vertical) for 30 minutes before starting.

#### **Connect drainage system**

You can find the hose wrapped around the back of the machine. Unwrap the entire hose and run it into a sink, toilet, drain, or bucket.

#### **Plug in the electrical cord**

Locate the electrical cord and unwrap around the air outlet located on the back of the unit. Plug it into a standard outlet with the correct voltage and amperage for the unit. If the unit experiences a loss of power, which can result from a power interruption and overheated.

#### **Before Transporting Your Dehumidifier**

Before moving the unit, make sure the pump is empty of water. To do this, let the unit stop dehumidification for 10mins. Push PURGE key to clear waters. See “How to Use the Touch Pad Control Panel” for more details.

- *Inspect filter.* Look for accumulated dust and dirt that would restrict airflow through the filter into the unit. If any is visible, vacuum out the debris. **Do not wash the filter.**

**Important:** Replace the filter whenever

- It has been vacuumed clean 3 times.
- It has been used on a mold remediation job.

### **Periodically Inspection (as needed)**

Make sure the unit is unplugged. Remove housing, in order to locate the coil, pump and drain hose.

- Check coil and clean visible dirty
  - Vacuum both sides of the coils until clean.
- Check pump
  - Inspect and clean the pump system regularly to maintain effective operation. Remove one screw to open up the top cover, and then open up the second cover. Clean the float shaft to make sure the floating switch can operate smoothly.
- Check drain hose
  - Look for obstructions. Disconnect and clear any debris present.

### **Warranty**

SunTec warrants to the original purchaser that if, within a period of 12 months from the date of purchase, this equipment is found to be defective either in original materials or workmanship (excluding normal usage wear and/or mishandling or abuse) the faulty part will be replaced free of charge upon presentation of the appropriate evidence, provided the unit is returned to the original supplier. Shipping expenses are not covered under the warranty.

## Error Messages

Message	Icon	Description
Er01	“PUMP ON” flashing	Problem with pump or pump tube is kinked.
Er02	N/A	Check coil temperature sensor at the side of coil and its sensor cable.
Er03	N/A	Check ambient temperature sensor in the front of the coil and its sensor cable.
<p>Note:</p> <ul style="list-style-type: none"> <li>When Er01 or Er02 error message comes up, the dehumidification will stop automatically. The machine will be back to STANDBY MODE and it won't be automatically turn off unless you do so. Contact your local distributor for service.</li> <li>When Er03 error message comes up, the dehumidification is still on. Contact your local distributor for service.</li> </ul>		

## Indication Light:

Status	Colors	Description
Off	N/A	Machine has been turned off.
On	Red	Machine has been turned on.
On	Green	Machine start dehumidification.

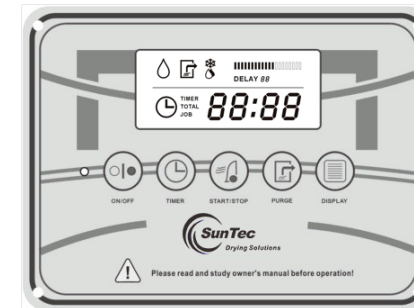
## Maintenance

**WARNING!** Always unplug any dehumidifier before performing maintenance procedures.

## Before Each Use

- Inspect the electrical cord for damage.
- Inspect pump tube. Make sure the pump tube is completely unwrapped and not kinked. Failure to do so can cause water to back up in the pump and leak out. The control panel may signal this problem by displaying “ER01

## How to Use the Touch Pad Control Panel






There are one LCD Display, one Indication Light (Red/Green) and five keys in the Suntec Dehumidifier touch pad control panel.



## LCD Display:

	<b>DEHUMIDIFIER ON.</b>
	<b>PURGE ON.</b> The pump is on and it is pumping water out of the container.
	<b>DEFROST ON.</b> Frost forming on the coils, defrost cycle start.
 DELAY 88	<b>DELAY BAR AND COUND DOWN.</b>
 TIMER 00:00	<b>“TIMER” CLOCK.</b> While displaying the “TIMER” CLOCK time, “TIMER” CLOCK icon is on. The four digits show how many <i>HOURS and MINUTES</i> the “TIMER” is.
 TOTAL 0	<b>“TOTAL” CLOCK.</b> While displaying the “TOTAL” CLOCK time, “TOTAL” CLOCK icon is on. The digits show how many <i>DAYS</i> the machine has been used.
 JOB 00:00	<b>“JOB” CLOCK.</b> While displaying the “JOB” CLOCK time, “JOB” CLOCK icon is on. The four digits show how many <i>HOURS and MINUTES</i> either the <i>CURRENT JOB</i> is running or the <i>LAST JOB</i> has been run.

## Touch Pad Keys:

	<p><b>ON/OFF.</b> Press the ON/OFF key to turn the machine on or off.</p> <ul style="list-style-type: none"> <li>When turning the machine on, the machine is under STANDBY MODE. The red indication light and LCD light up. LCD displays “TIMER” CLOCK icon. Four Time digits flash, which indicates the operator either to set the “TIMER” by pressing the “TIMER” KEY or to start the machine directly by pressing the “START/STOP” KEY.</li> <li>Press the ON/OFF key again to turn the machine off. The red indication light and LCD light off. <b>Note:</b> In STANDBY MODE, the machine can also be automatically turned off if there are no other keys pressed within 15mins.</li> </ul>
	<p><b>TIMER.</b> By using the “TIMER” key, the dehumidification time can be set as you require.</p> <ul style="list-style-type: none"> <li>The “TIMER” time setting range is from 00:00 to 23:50. It increases by 10mins for every key press</li> <li>Press the “TIMER” key without releasing; the time can be adjusted continually.</li> </ul>
	<p><b>START/STOP.</b> Press the START/STOP key to start or stop the dehumidification.</p> <ul style="list-style-type: none"> <li>When dehumidification starts, the machine performs a compressor delay. The display reads a numeral count down from a maximum of 90 seconds to 0. (30 seconds count down for the first startup). The DELAY BAR flashes during this count down period.</li> <li>While the dehumidification is on, the display reads “DEHUMIDIFIER ON” icon.</li> <li>The dehumidification runs continuously if there is no “TIMER” has been set before it starts.</li> <li>Otherwise, the dehumidification stops as the “TIMER” set.</li> <li>Press the START/STOP key again to stop the dehumidification. The “DEHUMIDIFICATION ON” icon comes off while the dehumidification stops.</li> </ul>

## Touch Pad Keys (Cont.):

	<p><b>PURGE.</b> Press the PURGE key to empty water from the pump reservoir. During the normal operation, the pump purges automatically whenever the reservoir is full. The display will read PURGE ON icon.</p> <p><u>TO PURGE THE PUMP MANUALLY BEFORE TRANSPORTATION:</u></p> <ul style="list-style-type: none"> <li>Stop the dehumidification using the START/STOP key, and let the unit sit for about 10mins. This allows water to drip from the coils.</li> <li>Press PURGE to remove residual water.</li> </ul>
	<p><b>DISPLAY.</b> Press the DISPLAY key to display “TIMER” CLOCK, “TOTAL” CLOCK and “JOB” CLOCK while the machine has been turned on. Press the DISPLAY key once can only display ONE kind of clock time.</p> <ul style="list-style-type: none"> <li>In STANDBY MODE, the default display is “TIMER” CLOCK time. By press the DISPLAY key once to display the “TOTAL” CLOCK time. Press it again to display “JOB” CLOCK time, which shows the LAST JOB run time.</li> <li>While the dehumidification stops as the “TIMER” set, the default CLOCK display is “TIMER” CLOCK time, which shows remaining running time of the CURRENT JOB. Press the DISPLAY key once to display the “TOTAL” CLOCK time. Press it again to display “JOB” CLOCK time, which counts the CURRENT JOB run time.</li> <li>While the dehumidification runs continuously without “TIMER” setting, the default CLOCK display is “JOB” CLOCK, which shows the CURRENT JOB running time. Press the DISPLAY key once to display “TIMER” CLOCK time, which reads “00:00”. Press it again to display the “TOTAL” CLOCK time.</li> <li>If the DISPLAY key has not been pressed within 15 seconds, the CLOCK time will back to its default display.</li> <li>When error messages are on, “TIMER”, “TOTAL” and “JOB” CLOCK displays disappear. Press DISPLAY key once to get the clock displays back.</li> </ul>