



**HUGO-X1**

PATENT PENDING



## The True Solution to Tankless Water Heaters

Introducing HUGO – The only battery backup system designed especially for tankless water heaters.

As the demand for tankless water heaters increases year after year and as more consumers realize the benefits and advantages of a tankless over traditional storage tank water heaters, the only question remains is: What happens when the power is out? HUGO is here to answer!

By providing 5-6 hours of continuous usage to any tankless water heater and by offering a Pure Sine Wave output and by acting as a battery backup and a surge protector, HUGO is the ideal product for homeowners and small businesses such as restaurants, clinics, small offices, laundries, salons, etc.

## FEATURES

- 5 hours of continuous operation
- Portable or permanent mount
- Indoor/Outdoor installation
- IP54 grade for all-weather protection
- 35Ah AGM non-spill battery
- Chirp alarm
- LED indicator for easy troubleshooting
- Flow sensor switch to prolong battery life
- Maintenance free operation
- Anti-Frost assist
- Auto activate within 8ms upon power outage
- Auto reset when main power becomes available
- Auto switchover between main power and inverter mode
- Built-in fuse to prevent board burnout and to protect downstream appliances
- Solar capable
- SMART technology to ensure constant clean power
- PURE SINE WAVE Technology
- Output: 500 VA / 350 W

## APPLICATIONS

- Any gas powered Tankless Water Heaters
- Storage tank heaters that require electric ignition
- Boilers
- Computers and Modems

## WARRANTY

- One (1) year manufacturer's warranty and free technical support
- Three (3) year extended warranty available

## TRICKS AND TIPS

- Hook up 2-3 tankless water heaters to one (1) HUGO with an extension cord (when freezing is not a concern)
- Unplug temp/flow port in front of inverter to allow HUGO act as a regular UPS for "no-flow" appliances or equipment
- Charge up HUGO and take it on the road to charge computers, cellphones or to act as a power station

## LED DISPLAY AND INDICATION

	Light	Off	Flashing
LINE: Green is the indicating lamp of utility	Normal utility	Abnormal utility	(unavailable)
INV: Green is the inverter state indicating lamp	Inverter output	Inverter close	Standby
BATT.LIM: Yellow is the battery state indicating lamp	Battery over-voltage and under voltage protection	Normal battery voltage	Normal: battery charging Rapid flashing: battery over/under voltage alarm
FAULT: Red is the machine fault indicating lamp	Machine protection	Machine normal	Output over load alarm

## TECHNICAL SPECIFICATION

Model No.	HUGO-X1	
Input	Input Voltage	Input Voltage
	Input Voltage	50 Hz/60Hz $\pm 10\%$
Output	P.F. (VA/W) = 0.6	500VA/350W
	Output Voltage	113-117V (at Battery Mode)
Protection	Output Frequency	When the grid power is working, output is the same as input when battery mode, frequency is 50/60Hz $\pm 0.1$
	Grid power fall protection	When the grid power < 92VAC, it will transfer to battery mode
	Grid power surge protection	When the grid power > 138VAC, it will transfer to battery mode
	Battery Over-discharging Protection	The UPS turns off automatically when the battery voltage too low
	Overload or Short-Circuit Protection	Battery mode: 105% < load < 150%, it last 5s then protect; 150% $\leq$ load, it lasts 200ms then protect; when short circuit, it protect at once grid power mode: 105% < load < 130%, just alarm no protect; 130% $\leq$ load < 150%, it lasts 5min then protect; 150% $\leq$ load, it lasts 10s then protect
Others	Transfer Time	$\leq 15\text{ms}$
	LED display	LED Display please refer to the section 4.2
	Weight	48.5017 lbs
	Dimensions (WxDxH)	9 x 14 x 12 in
	Operating Temperature	23 to +104°F
	Humidity	< 95% (non-condensing)



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