

ADVANCED SITE SUPPORT EQUIPMENT

LIGHT, HEAT AND SURVEILLANCE PRODUCTS

OUR PORTFOLIO



HYBRIDLIGHT
SOLUTIONS

SAFETY THAW

V1.0 2024

Leading edge equipment technology.

www.hybridlightsolutions.com

OUR VISION

OUR MISSION

To set the gold standard for reliability in site support equipment solutions across all industries we serve. Through lean manufacturing excellence and an unwavering focus on the finer details, we aim to exceed your expectations every time.



**Years of in-field
experience in some
of the most rugged
conditions .**



We have a dedication to quality, continuous improvement, and service for our customers/

At Hybrid Light Solutions, our commitment to excellence is unwavering, and it's the driving force behind everything we do. We understand that you have options when purchasing equipment, but we want to assure you that choosing us means more than just acquiring a product. It's about embracing a partnership dedicated to exceptional product quality, unparalleled after-sales support, and a customer service experience that genuinely sets us apart.

Our rigorous quality control systems are at the heart of our production process, ensuring every piece of equipment meets the highest standards of quality assurance (QA) and quality control (QC). We're proud that our machines are not only meticulously crafted but also versatile, ready to perform optimally across diverse regions within North America.

Innovation is key at HLS. We don't just build equipment; we craft distinctive solutions, tailored to maximize application performance. Our design process is a testament to our

commitment to creating not just products, but experiences that truly make a difference in your work.

Selling our products is just the start of our journey with you. We distinguish ourselves through relentless dedication to providing the highest level of product support and customer care. Our mission is to ensure your success, and we are steadfast in our commitment to be there for you, every step of the way.

With our extensive experience in the industry, we lead product development with a unique perspective, focusing on continuous innovation. "Continuous improvement" is more than a slogan for us – it's a philosophy. We constantly challenge ourselves and our team to deepen our understanding of our customers' needs and challenges.

Choose Hybrid Light Solutions – where quality, innovation, and customer success are not just promises, but our reality.

CONTROL OF ALL PRODUCTION PHASES.

TOP COMPONENTS



**EFFICIENT
ASSEMBLY
WITH
ATTENTION
TO THE
DETAILS**



**A MIND SET
OF QUALITY
FIRST**



MADE IN USA



**Designed, engineered, and tested
by a team from the US and Canada**

HLS MODEL 230

Future positioned.

The HLS Model 230 has been meticulously engineered from the ground up to set a new benchmark for power and reliability in hybrid tower systems. Utilizing cutting-edge, low-emission diesel engines in concert with renewable solar energy, we offer a comprehensive solution for our clients. This is made possible by HLS's innovative hybrid core technology, which seamlessly integrates these power sources to deliver unparalleled performance.



Model 230 Specifications

PARAMETER	VALUE
Manufacturer	Doosan D10 or Cat C1.1
Emissions Compliance	US EPA, Environment Canada
Speed / Governor	2450 RPM Max charge / Electric
Max Fuel Consumption	0.75 GPH/2.8LPH
Charge Time (20%-100%)	53 minutes
Engine Gross Power Output	17.9 kW @ 3000 RPM
Power System	
Alternator Configuration	PMG Alternator + Rectifier
Standby Amperage Rating	200 amps
Continuous Amperage Rating	150 amps
Alternator IP Protection	IP 23
Battery Type	Lithium Ion - LIPO4 Chemistry
Battery	10.4 kW / 230 AH, 48v Nominal
Solar Panel Rating	600 Watts
Tower	
Type	Hydraulic first stage, cable second stages
Height	23 feet
Outriggers	5 x Outriggers with Mechanical Jack
Wind Rating	70 MPH
Fuel Capacity	118 US gallons, 446 liters
Axle	1 x 4500 lbs torsion flex
Containment System	120% Fluid Containment System
Coupling	2-5/16" ball optional pintle
Compliance	DOT and Transport Canada
DIMENSIONS	
Stowed Length / width	119.6" x 62" / 3037 mm x 1574 mm
Dry Weight (lbs/kg)	3712 lb / 1687 kg

HYBRIDLIGHT SOLUTIONS



Modern high output LED lighting packages to provide high coverage lighting in critical situations



Ready for connected technology for performance monitoring and remote management and control



The business case for hybrid power site support equipment.



1 Fuel consumption reduction

Fuel cost reductions result in real operating cost savings over the life of the machine.



2 Emissions Reductions

Greenhouse gas reductions that fit in your current operational needs.



3 Complement and enhance human efforts

A hybrid-based machine can help with almost any project that requires equipment. We use high-output lighting to enhance lean operations by improving safety and working conditions.

How can we drive better results? What steps can we take to improve our operational efficiency?

When it comes to site support equipment, know your return on investment. The best and only way to compare solutions is to use the big picture methodology; while up front costs and machine rent are important, don't forget that the total cost of operation is the most accurate metric.

- 1 **Fuel Consumption Reduction** the HLS 230 unit is capable of reducing operating costs significantly vs. traditional light tower technology 80+% fuel consumption reduction and with added efficiencies 100+% total cost reductions possible - contact us today for a side by side comparison for your specific project
- 2 Reduce **engine maintenance** to a maximum of two oil changes per year based on 24/7/365 usage
- 3 Reduce requirements for human interaction, site support equipment that has been designed to be plug and play.

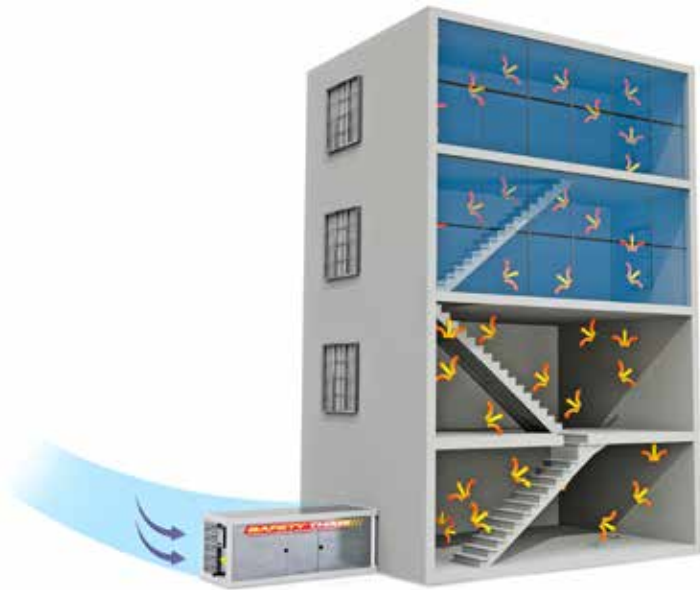


DIRECT FIRED HEATERS

MAKE UP AIR HEAT

Telematic Ready.

Welcome to the forefront of heating innovation, where we proudly present our diverse range of portal make-up air heating systems. Our lineup offers unparalleled performance and reliability, ranging from an efficient 600,000 BTU to a formidable 4,500,000 BTU.



Experience Unmatched Site-Wide Pressurization: Our High-Volume Fan System

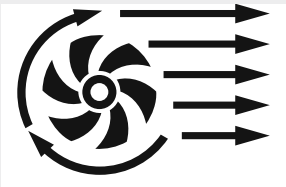


Advanced burner management with detailed fault codes



Optional VFD controller limits inrush currents and is flexible for temp power systems

Make up heating systems made for modern projects.



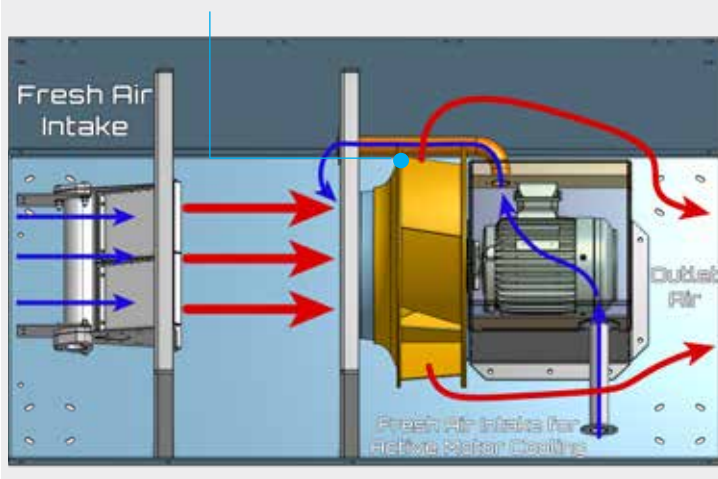
1 Forced mechanical ventilation

Treated air is spread throughout the construction site to heat the entire project



2 Variable control

Our technology adjusts to the ambient temperature to provide consistent heat to the project while reducing fuel use.



Temporary heating systems built to provide the highest level of uptime and dependability.

Understand your return on investment when it comes to site support equipment. The best and only lens to compare solutions is with the big picture methodology; initial cost and machine rent are essential; however, don't lose sight that the total cost of operation is the most authentic metric possible.

- ▶ Our makeup air system delivers forced mechanical ventilation to the project site, allowing treated air to circulate throughout it.
- ▶ Our system raises the surface temperature of curing construction materials to speed up and optimize the curing process while still protecting quality.
- ▶ Manage site humidity by providing treated air; we can control site humidity with pressurization to speed up cure periods and limit the risk of mould.



1 Designed for reliability

We design for continual uptime since heating equipment must be ready to function in any scenario, from freezing weather to other difficult conditions.

2 Stainless Burner Head

Our modulating burner allows you to have complete control. However, let's face it: the ambient temperature changes frequently, and the system must be prepared to respond.

PARAMETER	ST-600	ST-1500	ST-2500	ST-4500
Max Input BTU/HR	600,000	1,500,000	2,500,000	4,500,000
Min Input BTU/HR	25,000	65,000	125,000	200,000
Fuel Gas Connection	3/4" NPT	1-1/4" NPT	1-1/2" NPT	2" NPT
Inlet Pressure Requirement	10-14 inches of water			
Modulation Rate	26:1			
Max Fire Rate LP	600,000 BTU / 6.5 GPH / 25 LPH	1,500,000 BTU / 16 GPH / 61 LPH	2,500,000 BTU / 27 GPH / 104 LPH	4,500,000 BTU / 48 GPH / 185 LPH
Max Fire Rate NG	600,000 BTU / 571 CFH / 16.5 m3/hr	1,500,000 BTU / 1428 CFH / 41.5 m3/hr	2,500,000 BTU / 2380 CFH / 68.8 m3/hr	4,500,000 BTU / 4368 CFH / 127 m3/hr
Fuel Compatibility	Natural or Propane Gas			
Electrical System				
Voltage / Circuit Requirement	120V, 1Ø 20 Amp	230V, 1Ø, 30 Amp 208V-230V, 3Ø 20 Amp	230V, 1Ø, 50 Amp 208V-230V, 3Ø 30 Amp	208/230V, 3Ø 60 Amp 460V, 3Ø 35 Amp 600V, 3Ø 30 Amp
Full Load Amps	16 amps	230V, 1Ø, 24 Amp 208V-230V, 3Ø 16 Amp	230V, 1Ø, 40 Amp 208V-230V, 3Ø 24 Amp	48 Amps @ 208V 23 Amps @ 480V 19 amps @ 600V
Fan Horsepower Rating	2 HP	5 HP	10 HP	15 HP
Blower System	Backwards Inclined Blower			Forward Curved Blower
Type				
CFM Rating	3000 CFM @ 2"H2O	7000 CFM @ 2"H2O	14, 000CFM @ 2"H2O	25,000 CFM @ 2"H2O
Drive Type	Direct Drive	Direct Drive	Direct Drive	Belt
Burner Management System	Fenwal		Siemens	
Fuel	Natural Gas or Propane Switchable			
Dimensions (LxWxH)	67.5" x 32" x 48"	*TBD	101.5" x 48" x 72"	130" x 71" x 71"
Compliance	ANSI Z83.7 / CSA 2.14			

SURVEILLANCE AND COMM TOWERS

HLS COMMS

Telematic Ready.

We manufacture a range of tower solutions that can be integrated into advanced surveillance and communication systems. With the ability to power additional accessories, our customers use our products to integrate into a range of surveillance, communication, and IOT applications.



Night Shift mobile towers are designed for rapid deployment, ensuring they can operate for extended periods when necessary. We offer customizable control systems tailored to meet specific customer needs.

Our solutions cater to a range of applications, from high-end, short-term surveillance to securing remote locations. Traditional setups in these contexts can often be expensive and complex. In contrast, Night Shift solutions are straightforward to implement, providing advanced surveillance capabilities that are both intelligent and cost-effective.

Applications include:

Surveillance: Ideal for public events such as elections, concerts, marathons, and festivals; construction sites for security monitoring or progress streaming; road projects offering live traffic updates; and safeguarding critical infrastructure.

Communication Tower: Perfect for industrial networking purposes.

Our compact mobile units are available in a variety of power configurations to suit different needs, including plug-in models with battery backup, solar-powered options, and hybrid diesel/solar solutions. This flexibility ensures that our units can adapt to diverse operational environments and energy requirements.

Specifications Model ZS-SKID

PARAMETER	VALUE
Tower	
Payload	150 Lbs
Max Height	25 Feet
Lighting Type	LED, 2 of 4 Lamp
Power System	DC
Battery Type	AGM
Voltage	24V or 48V
Charing System	Solar or Shore Power
Shore Power	120V, 15 Amp, Addiitonal Options



FLAMELESS AIR HEATERS

ST MODEL 700

Telematic Ready.

High performance, our flameless heating system provides clean, dry heat in the most demanding conditions. Our system provides industry-leading digital control designed to manage all aspects of the machine to deliver smart operation.

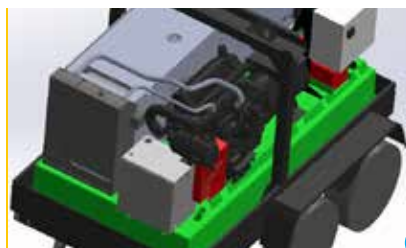


The remote thermostat allows for reduced energy usage vs. traditional flameless without thermostat, 50+% fuel savings on a seasonal basis are possible.

Advanced warning light system lets operators know when machines require fuel or DEF.

Specifications Model 700

PARAMETER	VALUE
Max BTU Output	700,000 BTU / HR
Fuel Tank Capacity	375 gallon, 1417 liters, 76 hours @ max
Max Temperature Rise	275°F, 135°C
Ducting Size	2 x 12"
Engine	
Model	D34T - 110HP - T4F
Total Displacement	3.4L
DEF Tank Capacity	30 Gal, 113 liters (Oversized long run)
Aspiration	Turbo/Inter-cooler
Max Operating Speed	1800 RPM
Lube Oil Capacity	12.6 quarts, 12 liters
Max Fuel Consumption	4.9 GPH, 18.5 LPH
Alternator	
Make	Mecc Alte
Model	ECP-32
Regulator	DSE, CSA Approved
Heating System	
Exhaust Gas Heat Exchanger	82% Efficiency
Blower System	Variable Speed and Temperature Rise
Type	Backwards Inclined
CFM	4000 CFM @ 6" Static Back Pressure
Machine	
Length	180 inches
Width	91.5 inches
Weight	6851 lbs

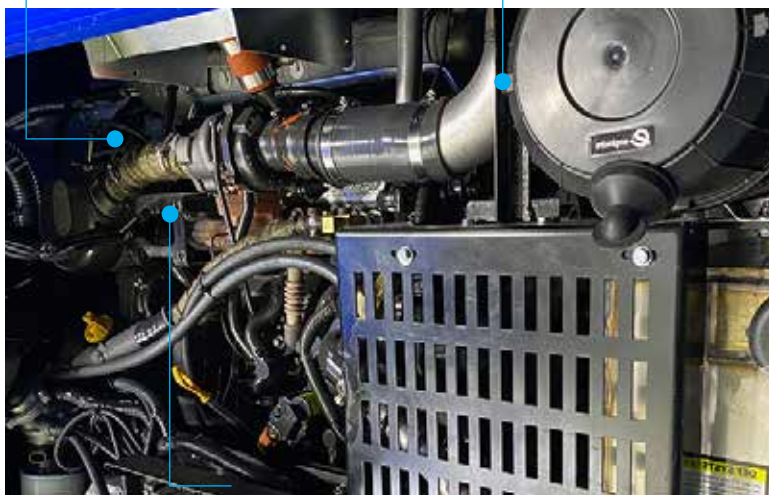


1 Designed for service

We work hard to ensure all our machines are designed in a way to make long term maintenance straightforward and efficient

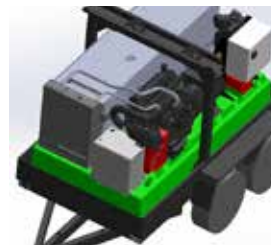
2 Simple, modern control

Good controls should not only manage the process well, but they should also be easy and dependable. We strive to make advanced technologies simple to understand and utilise.





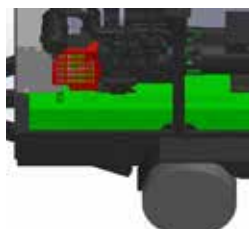
Simple design method uses proven electrical based components.



Robust design, tube steel construction,



Advanced control system that is simple to operate



110% Fluid containment, which includes external service drains for oil change



Advanced flameless heating technology.



- 1 Remote Thermostat**
Enables better management the temperature of the temperature and reduce fuel consumption.
- 2 High Static Pressure**
Our system can operate at high CFM and static pressure, giving you the freedom to deliver treated air wherever you need it.



Flameless heating technology that is both reliable and easy to use.

In most flameless heating applications there is an abundance of waste in the form of over heating. It is critical to protect certain processes from freezing during normal winter operation, however the majority of heating applications today don't use remote thermostats and on warmer days, wasting energy by over heating applications and increasing wear on machines.

- 1** Based on proven diesel engine designs. Doosan diesel engines offer proven longevity and reliability.
- 2** The integrated control system manages all aspects of machine control from a single, easy to access location—automated engine controller with integrated low fuel shutdown.
- 3** Our system sets up quickly and efficiently for customer applications. These units can deploy rapidly, quickly, and maximize safety through operational excellence.



HYBRIDLIGHT SOLUTIONS

Technology for modern operations.

Elevate your operational excellence with our meticulously crafted site support equipment. Engineered to enhance efficiency and optimize performance, our products are the embodiment of precision and reliability, delivering unparalleled solutions to streamline your processes.



Contact

Direct: 1-218-568-1188
E-mail: info@hybridlightsolutions.com

HQ and Manufacturing
Hybrid Light Solutions LLC.
4604 Morehouse Drive
Pequot Lakes, Minnesota
56472

Canada Sales Office
Hybrid Light Solutions LLC.
#8, 26004 TWP 544
Sturgeon County, AB
T8T 0B6



Contact us today, we are excited to learn more about your application.

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