

HEAT, LIGHT, POWER, AND SURVEILLANCE PRODUCTS

2022 PORTFOLIO



V1.1

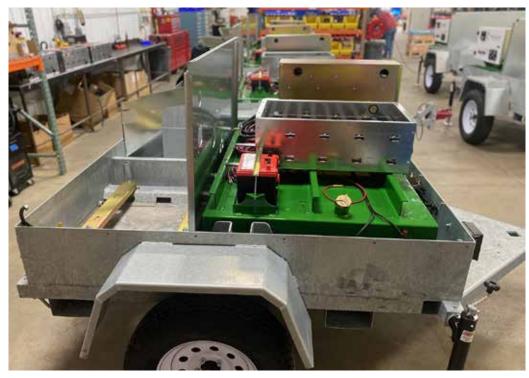
Leading edge equipment technology.





OUR PHILOSOPHY

Our goal is to be the most dependable provider of site support equipment solutions in the industries we serve, committed to lean manufacturing and paying special attention to the details.



Our product line has been created to help you achieve your goals.



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

We are dedicated to quality, continuous improvement and service for our customers. You can buy a piece of equipment from anyone, but knowing that we're passionate about providing a high level of product quality, after-sale, and customer service and support.

We have several quality control systems that allow us to maintain high levels of QC and QA during our production process. In addition, our machines and equipment is ready for use across most regions within North America.

- How can we build a distinctive solution by designing equipment through the lens of application performance?
- Selling our products is simply the beginning; to

set ourselves apart, we focus on giving the best level of product and customer support - we won't stop until our clients are successful.

Our experience in the business allows us to lead our product development in a different way. When we say "continuous improvement," we mean it. We consistently challenge ourselves and our team to better understand customer needs and difficulties.

Please help us understand more about your application requirement.

CONTROL OF ALL PRODUCTION PHASES.

TOP COMPONENTS









EFFICIENT ASSEMBLY WITH **ATTENTION** TO THE **DETAILS**





A MIND SET OF QUALITY FIRST





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





HLS MODEL 230

Future positioned.

The HLS Model 200 was built from the ground up to be the most powerful and dependable hybrid tower system available. We employ renewable solar energy and the newest in low-emission diesel engines to present a full solution to our customers, which is delivered through HLS's unique hybrid core technology.







Specifications Model 230

| Specifications | Model 230 |
|----------------------------|--|
| ENGINE | |
| Manufacturer | Doosan D10 Diesel or Cat C1.1 |
| Emissions Compliance | US EPA, Environment Canada: Tier 4 Final |
| Starting System | 12V Dedicated Battery System |
| Speed / Governor | Electric / 2200 RPM Max charge |
| 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 |
| Voltage | DC Nominal 48V |
| Standby Amperage Rating | 200 amps |
| Continuous Amperage Rating | 150 amps |
| Alternator IP Protection | IP 23 |
| Battery Type | Lithium Ion - LIPO4 Chemistry |
| Battery Capacity | 10.4 kW / 230 AH |
| Solar Panel Rating | 600 Watts |
| Tower | |
| Туре | Hydraulic first stage, cable second stages |
| Height | 23 feet |
| Outriggers | 5 x Outriggers with Mechanical Jack |
| Wind Rating | 70 MPH |
| Fuel Capacity | 65 US gallons, 245 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 | |
| Deployed Length / width | 171" x 164" / 4343 mm x 4165 mm |
| Stowed Length / width | 127" x 81" / 3225 mm x 2057 mm |
| Dry Weight (lbs/kg) | 3712 lb / 1687 kg |
| | |





ogy for performance monitoring and remote management and control

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 230D 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

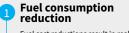
2 Reduce engine maintenance to a maximum of two oil changes per year based on 24/7/365 usage

3 By utilizing machine automation to improve temporary lighting, you save time and money.



The business case for hybrid power site support equipment.





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



2 Emissions Reductions Greenhouse gas reductions do not necessitate a complete revamp of your operation; we can give significant benefits with a 165 percent reduction in CO2



3 Complement and enhance human efforts

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



NightShift Mobile - High performance mobile tower solutions.

Proven surveillance solutions
Field proven reliability

Night Shift mobile tower systems can be deployed quickly and provide long-term operation if required.

We have industry-leading control designed to manage all aspects of the machine to provide intelligent operations.

Sometimes there's a need for high-end surveillance, but only for a limited period. And sometimes, there are distant locations that need to be secured. Unfortunately, it is often too complex or expensive to install a dedicated network infrastructure for a traditional surveillance installation in both cases.

That's when our deployable solutions make a big difference. They are quick and easy to install yet offer leading-edge surveillance capabilities. Our product is smart & cost-efficient for multiple use cases

Possible applications

- Surveillance: Public, temporary events such as election rallies, concerts, marathons or festivals, construction sites, for security purposes or to share the construction progress over the Internet, Road construction projects, where authorities need a live view for optimized traffic management, Critical infrastructure, for reliable monitoring of remote and unattended sites
- Communication Tower: Industrial site networking

Our mobile units take up a small amount of space. They are available in several configurations, from plug-in with a backup battery to fully solar or hybrid diesel / solar power.

Designed for 24/7 surveillance operations. Quick field setup with 15 minute deployment time.



NightShift Mobile - High performance mobile tower solutions.



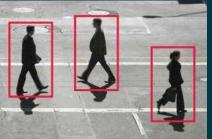
| Specification | Night Shift |
|----------------------------------|--|
| Unit | |
| Battery Options | Lithium Ion, AGM, Gel |
| Operating Temp Range | 120°F to -40°F |
| Solar Options | 600-1200 Watts |
| Solar Charge Controller | 120v Integrated Charger, 13 Amps |
| Cellular Connected | HSPA/WCDMA/EDGE/GPRS |
| AT&T, Verizon Ready, Bell, Telus | Dual SIM Card Support |
| NightShift Web Based Network | Machine monitoring solutions with advanced telematic capabilities |
| Integrated Video Storage | Wide range of options and configurations |
| Motion Activated Recording | Alerts based on schedules |
| Camera Type Options | PTZ, Fixed , Thermal, Audible Speakers and Microphones, AC Inverter, Antennas, Weather Station, Designed to customer specification |
| Design Options | |
| Package Options | Skid, Trailer, XP Rated |
| Recording time in High Res | To customer requirement |
| Recording Quality | To customer requirement |
| Standard units | 720P Recording, Higher Res Optional |
| Optional IO | Remote monitoring, lighting and |
| | other warning systems, tamper |
| | detection |
| High Security | VPN Ready for Data Security |
| Hardened Components | Customer hardware integration |
| Usage Alerts | Local/Remote firmware upgradable |



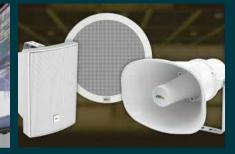
THE DETAILS

What's under the hood matters

Building power systems requires a focus on utilizing a group of components to deliver maximum uptime by providing reliability and performance. Our systems are designed for tough conditions and a wide array of applications.







Analytic and other applications.

Our analytic applications enable proactive surveillance, helping your security staff protect your property by detecting and deterring crime. The applications can, for example, detect trespassers or loiterers and automatically notify a guard or play a message over a loud-

Remote management ready design
Our equipment comes ready to
integrate into our customer's command
and control systems, focusing on
remote monitoring capabilities out of

Network Audio and Recording Systems Network audio systems are complete high-quality audio systems you can use

Speak or Microphone options.











FLAMELESS AIR HEATERS





ST MODEL 550

Telematic Ready.

High performance, our flameless indirect fired 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.



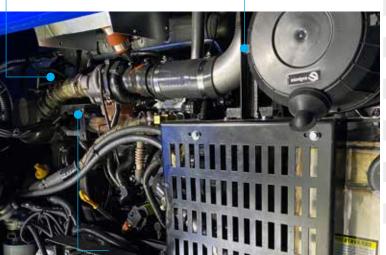




We work hard to ensure all our



process well, but they should also be easy and







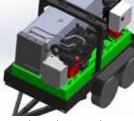
Specifications Model 550

| PARAMETER | VALUE |
|----------------------------|------------------------------------|
| Max Input BTU | 625,500 BTU/HR |
| Net Output BTU | 512,910 BTU/HR |
| Fuel Tank Capacity | 375 gallon, 1417 liters |
| Max Temperature Rise | 275°F, 135°C |
| Ducting Size | 2 x 12" or 1 x 18" |
| Engine | |
| Model | D34T - 110HP - T4F |
| Total Displacement | 3.4L |
| DEF Tank Capacity | 30 Gal, 113 liters |
| Aspiration | Turbo/Inter-cooler |
| Max Operating Speed | 1800 RPM |
| Lube Oil Capacity | 12.6 quarts, 12 liters |
| Max Fuel Consumption | 4.5 GPH, 17 LPH |
| Alternator | |
| Make | Mecc Alte |
| Model | ECP-32 |
| Regulator | DSE, CSA Approved |
| Heating System | |
| Exhaust Gas Heat Exchanger | 82% Efficiency |
| Electric Elements | Low Surface Temp Type |
| Electric Element Steps | 3 x 20kW, 1 x 10 kW |
| Blower System | |
| Туре | Backwards Inclined |
| CFM | 4000 CFM @ 6" Static Back Pressure |
| Machine | |
| Length | 180 inches |
| Width | 91.5 inches |
| Weight | 6851 lbs |
| | |





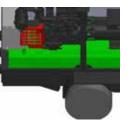
method uses proven electrical based components.



Robust design, tube steel construction,



Advanced control system that is simple to operate



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



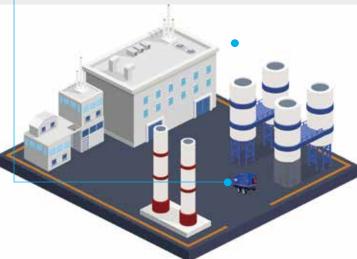
Advanced flameless heating technology.



Thermostat operation To better manage the temperature of the process and reduce fuel consumption, we use remote thermostat operation



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







ST MODEL 4500DF

Telematic Ready.

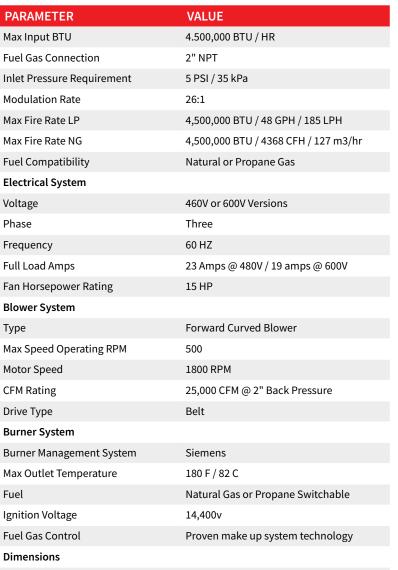
The Safety Thaw Model 4500DF was designed for large projects that require extremely reliable construction and make-up air heating. We provide a great option for commercial and industrial heating with our 4,500,000 BTU firing rate - this heater can handle the largest projects and provide complete temperature control during winter operation.







Specifications Model 4500DF



130"

7 1"











Our high-volume fan can pressurize whole project sites

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.





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



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.

2 Our system raises the surface temperature of curing construction materials to speed up and optimize the curing process while still protecting quality.

3 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.





ever, let's face it: the ambient temperature

Length Width

be prepared to respond

ANSI Z83.7 / CSA 2.14

Designed for reliability

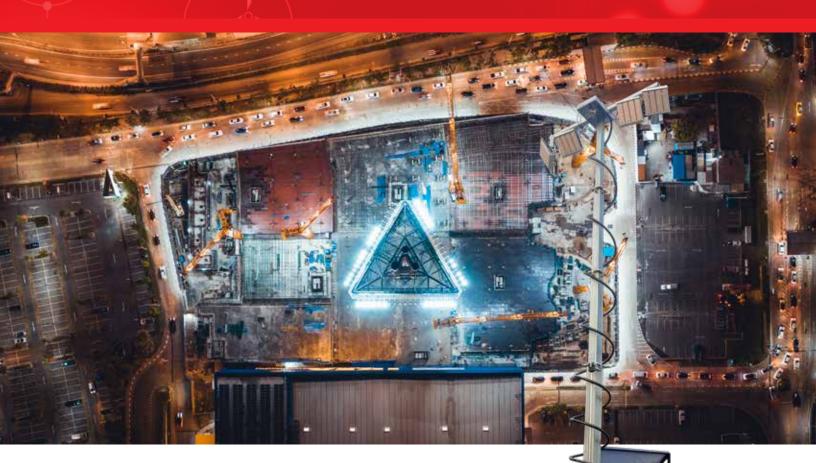
g equipment must be ready





Technology for modern operations.

Site support equipment designed to bring solutions to the table in the form of efficiency and performance build with attention to detail.



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

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