

HEAVY-DUTY HEATERS | SAVE MONEY AND THE ENVIRONMENT

# HEATERS FOR OFF-HIGHWAY AND ENERGY MARKET APPLICATIONS



A WORLD OF COMFORT





## ESPAR - PROVIDING THE HEAT TO KEEP YOU RUNNING

Espar's pre-heaters are capable of heating systems from small non-mobile equipment and light trucks all the way up to 2,500HP+ diesel engines. With this warmed engine coolant other system fluids, hydraulic oils and fuel, can be heated to ensure usability in the most demanding weather. Espar's forced air heaters can provide economical heat for operator cabs and truck sleepers all the way up to cargo and workspace heating. Ample amounts of heat allows operators and technicians to function safely and efficiently in winter environments.

### MAXIMUM COLD WEATHER EQUIPMENT PRODUCTIVITY

- Engine pre-heating for reliable cold weather starts
- Fluid pre-heating for full hydraulic system readiness
- Cab and compartment heating for productive operator environments
- Reliable heat delivery, proven in the field

Warm engine starts provide operation reliability in almost any application while avoiding many of the mechanical issues cold weather creates. Engines start easier so there's less stress on cranking system components and less wear on major powertrain parts.

### MAXIMUM ADVANTAGE FOR YOUR BUSINESS

- Lower winter operating costs
- Reduced equipment idle times for heating
- Cold-start repairs and maintenance are reduced
- Lower jobsite emissions
- All without sacrificing operator comfort or safety

Espar heaters are compact, easy to maintain and operate, and can provide years of reliable service. They come in sizes to fit almost any application and are backed by an extensive worldwide dealer network.





## MAXIMIZING EVERY OFF-HIGHWAY APPLICATION

### PREHEATING SYSTEMS

42,000/42KW – 120,000/35KW BTU

- Engine pre-heating for reliable cold weather starts
- Fluid pre-heating for full hydraulic system readiness
- Cab and compartment heating for productive operator environments
- Reliable heat delivery, proven in the field

BOXED HYDRONIC L-II



### FORCED AIR HEATERS

7,500/2KW – 28,000/8KW BTU

- Operator and cab compartments
- Instrument panel heating
- Mobile technician workspace
- Crew shelter heating
- Cargo heating capability

D8LC



### DELIVERING HEAT FOR ALMOST ANY OFF-HIGHWAY REQUIREMENT

- Portable self-contained air heaters that can be moved for use as needed (15,000 - 28,000BTU)
- Small preheaters for light trucks, and smaller on-site equipment (17,000BTU)
- Control options for ease of use and equipment startability protection
- Heat exchangers to deliver heat in almost any size reservoir
- Compact, lightweight heating packages – backed around the world

Espar offers a full line of 12V and 24V heaters. For a complete listing of products and specifications contact your local dealer or visit [www.espar.com](http://www.espar.com)



## ADVANCED HEATING TECHNOLOGY

### HYDRONIC L-II

The L-Series is Espar's high output range of heaters. It offers four output levels (16, 24, 30 and 35KW) in one footprint for maximum flexibility and reduced engineering costs. The L-Series was introduced in 2001 and updated in 2008, bringing a new level of technology to large heater platforms. Advanced ECU software provides overheat protection while features like a preheated burner head, heavy-duty harness and connectors, and lower power consumption make this heater one of the most reliable units available.

HYDRONIC L-II COOLANT HEATER	HYDRONIC 16	HYDRONIC 24	HYDRONIC 30	HYDRONIC 35
Heat Output BTU/hr (kW)	54,630 (16)	87,950 (24)	102,430 (30)	120,000 (35)
Fuel Consumption U.S. gal/hr (l/hr)	0.53 (2.0)	0.77 (2.9)	0.98 (3.7)	1.11 (4.2)
Electrical Consumption (24V) Heater only – without coolant pump Available in both 12 and 24V	2.5 amps	3.33 amps	4.38 amps	5 amps
Weight	40 lbs. (18.14 kg)			
Water throughput	1,374 U.S. gal/hr against 3 psi (5200 l/hr against 0.2 bar)			

### HYDRONIC M-II

The Hydronic M-Series is the latest technology available in medium-duty heater platforms and the highest output evaporative heater available. Like the L-Series it offers multiple output levels in a single package size with three output ratings (8, 10 and 12KW) available. Add in features like up to six operating speeds, brushless blower motor and automatic altitude adjustment – and you've got a the most productive heater in its size.

HYDRONIC M-II COOLANT HEATER	HYDRONIC M-8	HYDRONIC M-10	HYDRONIC M-12
Heat Output 12V BTU/hr (kW) 24V	5,120 (1.5) 27,300 (8.0)	5,120 (1.5) 32,437 (9.5)	4,100 (1.2) 41,000 (12)
Fuel Consumption U.S. gal/hr (l/hr)	0.24 (0.90) 0.05 (0.18)	0.32 (1.2) 0.05 (0.18)	0.40 (1.5) 0.04 (0.15)
Electrical Consumption 12V	2.9 - 4.6 amps	2.9 - 7.2 amps	2.8 - 11 amps

### AIRTRONIC

The Airtronic heater made a name for itself as the factory-installed sales leader in Class 8 linehaul trucks. Along with the higher output D4 and D5 models, it is ideally suited for similar applications in the off-highway market, providing ample cab heat for haul trucks and heavy equipment alike.

AIR HEATERS		AIRTRONIC D2	AIRTRONIC D4	AIRTRONIC D5
Heat Output BTU/hr (kW)	Boost	7,500 (2.2)	13,650 (4)	18,800 (5.5)
	High	6,500 (1.8)	10,200 (3)	16,400 (4.8)
	Med	4,100 (1.2)	6,800 (2)	9,200 (2.7)
	Low	2,900 (0.85)	3,400 (0.9)	4,100 (1.2)
Fuel Consumption U.S. gal/hr (l/hr)	Diesel 1/2 Boost	0.07 (0.28)	0.13 (0.51)	0.17 (0.66)
	High	0.06 (0.23)	0.10 (0.38)	0.15 (0.58)
	Med	0.04 (0.15)	0.07 (0.25)	0.09 (0.34)
	Low	0.02 (0.10)	0.03 (0.11)	0.04 (0.15)
Electrical Consumption 12V model shown 12V or 24V available	Boost	2.8 amps	3.3 amps	7.1 amps
	High	1.8 amps	2.0 amps	6.7 amps
	Med	1.0 amps	1.1 amps	2.5 amps
	Low	0.67 amps	0.6 amps	1.3 amps

Espar offers the most technologically advanced line of heaters and controllers available on the market today. Let us help make your winter operation more productive and cost efficient.

Espar heaters – they just make sense.





## OPTIONS FOR MAXIMUM PRODUCTIVITY

Espar not only manufactures the best heater for your off-highway applications, we also provide the best means of maximizing their benefit in the field. Whether it's easy-to-use controllers or options to provide reliable service at higher altitudes, Espar provides the most complete heating package to maximize return on your heater investment.

### MULTI-FUNCTION ZOOM SWITCH

Zero Obstacle Option Management is the ideal name for this versatile switch. Created specifically for the energy market, the Zoom switch provides a high degree of operational control while maintaining the same level of equipment reliability.

The ZOOM Switch has programmable:

- Timer Function - To allow turn-on-and-walk-away use for maximum protection against no-start situations if the heater is accidentally left on
- Low Voltage Disconnect – Protects equipment startability by automatically turning the heater off if battery voltage levels drop to within your programmed limits
- Ambient Temperature Sensor - Prevents heater operation on warmer days, further reducing operating power loads and unnecessary run time hours
- Dual Output Capability – For remote and/or local mounting of start button

### D8LC

Espar's D8LC heater provides up to 149 CFM of forced air heat and is ideal for cargo or workspace applications requiring heating for larger areas. Espar is the only manufacturer to offer a high output heater in this range.

### DIGI-CONTROLLER

The Digi-Controller is the latest in air heater control options from Espar. It has a built-in ambient air temperature sensor for precise heat delivery, a standard air circulation mode and full on-board diagnostics with the ability to view and clear fault codes right from the controller. The Digi-Controller is easy to use and even comes with a 10-hour automatic shutoff feature to eliminate unnecessary run times.

### POLARN

Polarn has incorporated two of Espar's popular air heater models into portable heating systems, ready for use wherever onsite heating may be required. Polarn offers two ratings that are ideal for crew shelters, equipment repair sites or any locations needing a non-fixed heat source.

### BCM / BLOWER CONTROL MODULE

Small engine pre-heaters, like the Hydronic 5, are ideal for use in light truck fleets. They offer the ability to preheat the engine and defrost the windows using timer control so the truck is ready for work upon the driver's arrival. In the past, installation typically required connecting into the OE fan motor wiring - which effectively bypasses its reduced amp draw features in order for the heater to have fan control. With the Espar BCM, blower motor amp draw is reduced as much as two-thirds by restoring pulse-width modulation to the circuit. The BCM incorporates a low-voltage disconnect for battery protection and restores OE circuit control when a key-on signal is received.

### HIGH ALTITUDE

In this business you never know where the job will take you, and operation at higher altitudes is not uncommon. Most heaters require a manual adjustment process to lean out the fuel mixture or accelerated carboning occurs and heater reliability is affected. With Espar Airtronic and Hydronic heaters you have the option of either a high-altitude kit with a preset fuel pump – or – a plug and play module that will automatically adjust fuel settings as needed. With the Hydronic M-II heater this function is a standard feature and happens automatically.

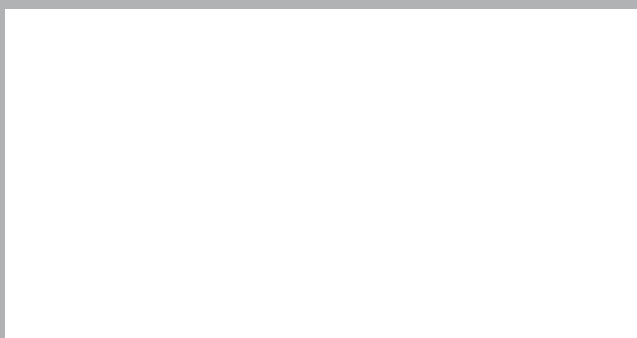
**At Espar we understand your needs - our products work best wherever you work most! Espar heaters, they just make sense!**

Espar heaters are backed by a global network of factory-authorized independent and OE dealers. For more information visit us on the web at [www.espar.com](http://www.espar.com).

Espar's full line of heating systems can be used in many applications, such as cars trucks, buses, motorhomes, off-highway equipment and marine.

Contact your local dealer for more information.

A member of the Worldwide **Eberspächer** Group of Companies.



**Espar Products, Inc.**  
(800) 387-4800  
(905) 670-0960  
[www.espar.com](http://www.espar.com)

