We set the standard in safety

# Engine shutdown unit

Reduce vehicle emissions, excess fuel consumption, and engine running time



Engine idling refers to leaving an engine running while the vehicle is not moving, which often occurs while parked or waiting. Since this increases emissions and fuel consumption, deterrents are in place to try and reduce these occurrences.

Ardent's engine shutdown unit is designed to reduce vehicle emissions, excess fuel consumption, and engine running time by monitoring and limiting vehicle idle time.

# What does our engine shutdown unit do?

The engine shutdown monitors the vehicle state to automatically shut down the engine after a defined period of inactivity. A warning signal is delivered to the driver prior to engine shutdown, allowing them to cancel the process if required.



### Three monitoring inputs

Our engine shutdown unit monitors three critical inputs – handbrake, vehicle speed, and gearbox position – to determine vehicle state and measure periods of inactivity.



### Configurable switch settings

Offering configurable settings for the engine shutdown time delay period, users can choose from a five-, eight-, or 10-minute delay.



## Compatible with our driver messaging system

A pre-warning audio message can be delivered to the driver via the driver messaging system: 'Warning, vehicle will shut down in 30 seconds."

## How does it work?

Our reliable unit monitors the running state of a vehicle through three critical vehicle signals. The recommended signals are:

- Vehicle handbrake applied
- Vehicle not moving (speed below 5 km/h)
- Gearbox in neutral position

When all critical inputs are active for the selected time period, the engine shutdown timer will start.

If all inputs remain active for the set time period (five, eight, or 10 minutes), the unit provides a switch output that can be used to break the ignition switch circuit.

### Driver messaging system integration

The engine shutdown unit can be linked to our driver messaging system. This allows audio messages to be delivered to the driver indicating that the shutdown timer has begun, for example: "All critical inputs active. Engine shutdown in five minutes".

The system can also deliver engine shutdown warnings, such as "Engine shutting down in 30 seconds".



# Key technical specification

Power supply voltage	16 V to 32 V
Nominal current consumption	50 mA
Critical inputs	x3 (low-side switched)
Auxiliary inputs	x1 (low-side switched)
Cut output	Used to energise external relay coil: high-side switched, not short-circuit protected, max. current 150mA
Warn output	Warn output low-side switched: overcurrent / short circuit protected, max. current 150mA

For the complete technical specification and operating instructions, please get in touch.

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To find out more or to explore how we can help you enhance the safety of your vehicles, contact our sales team on +44 (0) 1423 326 740



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