The Smarter Alternative for Idle Reduction

# How Much Are You Spending To Save?

***Idle Smart costs 78% less than an APU and provides an ROI almost 6x higher***

All fleet investments require weighing tradeoffs and determining a return on investment. Idle reduction technologies are no exception, and with the wide range of solutions that are available today, side-by-side comparisons are an essential means to making cost effective purchasing decisions.

A useful approach to answering the question, "*How much are you actually spending in order to save money?*" is to fully evaluate all costs and benefits. Factors to consider include purchase price as well as the costs and benefits of different ongoing operating profiles.

From a cost standpoint, there are three quantifiable buckets: purchase price, cost to run, and cost to maintain. Downtime costs can also be considered but for comparison purposes are much more difficult to quantify.

For all idle reduction technologies, the one major benefit each provides is a reduction in fuel consumption. And while there are a handful of other benefits, such as longer service intervals and reduced wear and tear, they are less tangible and harder to determine.

A comparison of two different idle reduction solutions shows how costs can be evaluated:

**Idle Smart**

| **Operating Benefits/(Costs)** | **Calculation** | **Value** |
|---|---|---|
| Fuel savings | 1,800 idle hours x 1.0 gallon/hour x $2.87 gallon x 60% idle reduction x 4 years | **$12,398** |
| Cost to run (Idle Smart) | | $0 |
| Cost to maintain (engine only) | 1,800 hours x 40% run time x 7.0 MPG ("idle hours") x $17,000 per service interval ÷ 1,000,000 miles per overhaul x 4 years | ($342) |
| Cost to purchase & install (low volume) | $2,000 purchase + $350 install | ($2,350) |
| **Net Benefit** | **Benefits** *less* **Costs** | **$9,706** |

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## APU

| Operating Benefits/(Costs) | Calculation | Value |
|---|---|---|
| Fuel savings | 1,800 hours x 1.0 gallon/hour x $2.87 gallon x 100% idle reduction x 4 years | **$20,664** |
| Cost to run (APU) | 1,800 hours x 0.15 gallon/hour x $2.87 gallon x 4 years | ($3,099) |
| Cost to maintain (APU) | $0.01 per mile x 120,000 miles x 4 years | ($4,800) |
| Cost to purchase & install (low volume) | $10,000 purchase + $1,000 install | ($11,000) |
| **Net Benefit** | **Benefits** *less* **Costs** | **$1,765** |

### Comparing Solutions

A capital investment of $2,350 in Idle Smart generates an operating return of $12,398 over four years and a net benefit of $9,706. In terms of payback, an investment in Idle Smart pays for itself in well under a year.

By contrast, a capital investment of $11,000 in an APU generates an operating return of $20,664 over four years but a net benefit of only $1,765. In terms of payback, the return on investment for a typical APU is almost 23 months.

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**NOTES**

*Benefits:*

- Based on 1,800 hours per year of idle time for a typical over-the-road tractor

*Cost to run:*

- Since Idle Smart uses the main engine to heat or cool the cabin, there are no additional costs to run.
- Based on manufacturer specifications that a diesel APU will use between 0.1 and 0.2 gallons of fuel per hour.

*Cost to maintain:*

- Idle Smart has no maintenance requirements. However, maintenance costs associated with Idle Smart, since it will run the main engine, can include service intervals that cost roughly $17,000, or about $0.017 per mile every 1 million miles.
- APU maintenance costs, based on consistent market feedback, are at least $0.01 per mile per year for the first four years.

*Fuel use at an average of $2.87 per gallon:*

- Research indicates that a diesel engine uses about 1.0 gallon of fuel per hour while idling. Typical results for Idle Smart yield a reduction in idle time of about 60% per year. For an APU, the assumption is a 100% reduction in engine idle time.

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