

# The most powerful module for starting engines up to 27L

**Eliminate down time  
and forget about  
battery problems -**

The SkelStart Engine  
Start Module will crank  
your engine reliably  
even at -40 °C/F



## What is SkelStart?

The SkelStart Engine Start Module is a supercapacitor engine start module. It will start your engine anywhere, every time, and will crank any large diesel engine reliably, time after time.

Supercapacitors are an engine storage technology similar to batteries, but their strengths are very high power, 15+ year lifetime, and excellent reliability, even in extreme temperatures.



## Why SkelStart?

Your batteries have to power the lights, the A/C, the lift gate, and all electronics in your vehicle. All this on top of having to crank the engine, which requires high current and decreases the lifetime of your batteries. Supercapacitors are designed to provide high current and are ideal for cranking large diesel engines. You'll never need to worry about your engine not starting again.



### High power

60x the power of batteries



### No downtime

reliable engine starting even with dead batteries



### Long lifespan

1M+ lifecycles, no maintenance needed



### Reliable at -40°C/F

with full efficiency



## Easy and safe installation

The SkelStart unit goes between your battery and starter, making it the sole starting power for your engine. The batteries will keep powering hotel loads (lights, A/C, and so on). Depending on your needs, the SkelStart can either replace one of your batteries, or be installed alongside your existing batteries.

## Reliable engine starting

Supercapacitors are highly resistant to harsh temperatures and operate at almost full efficiency even at -40 °C/F.

The SkelStart only needs 9V to recharge, so it works even if your batteries are dead.

## Longer battery lifespan

Increases battery lifespan of up to 2X.

Starting power does not come from the batteries anymore, protecting them from frequent, high peaks of current.

## One-time investment

Supercapacitors have a lifespan of 1+ million charge-discharge cycles, meaning the SkelStart will last the entire lifetime of your vehicle.

No maintenance or upgrades required.

## Improved fuel economy

No need to idle your engine to keep the battery charged.

Eliminating idling can reduce fuel consumption by 400 liters or 106 gallons a year (on average), saving money, reducing CO<sub>2</sub>, and NO<sub>x</sub> emissions.

## What Our Customer Says



*“UAP develops sustainable and efficient programs and business practices that improve our customer's performance while protecting our planet. UAP is also the leader in the Canadian aftermarket and always seeks to offer best-in-class products and technology solutions for his customers.*”

*The world's most powerful system, the SkelStart supercapacitor ensures engine starting even in extreme cold, without the need for boosting, while increasing battery life. Easy to install, carriers who use it quickly benefit from its advantages. This is a gain in efficiency and money. We are proud to be able to offer this product to our customers and fleets across the country.”*

**Jean-François Favreau**

Senior Market Manager / Product development / Global Sourcing  
at Heavy-Duty Parts UAP



	SkelStart 12V	SkelStart 24V	Unit
Cold Cranking Amps (CCA)*	2130	1230	A
Maximum Peak Current (1 sec current)**	3829	2547	A
Peak Power**	44.7	76.1	kW
Charged full voltage	14.1	28.2	V
Energy	35	35	Wh
Rated Capacitance	1360	340	F
Individual Cell Capacitance	3400	3400	F
Charging current	20 (max)	20 (max)	A
Continuous input voltage range	9-16	18-32	V
Continuous input voltage range with specified charge time	11.5-16	23-32	V
Recharge time (from 0 V)	20	10	min
Operating temperature	-40 to +65 -40 to +149	-40 to +65 -40 to +149	Deg °C Deg °F
Standby current draw	<10	<10	mA
Dimensions	328 L x 171 W x 241 H 12.91 x 6.73 x 9.49	328 L x 171 W x 241 H 12.91 x 6.73 x 9.49	mm in
Weight	8.5 18.74	8.5 18.74	kg lbs
Threads and Nut size	M8 (Metric)	M8 (Metric)	

\* Based on 1s ESR

\*\* The stated maximum peak current should not be exceeded during use. If the limit is to be exceeded by the customer, Skeleton must be consulted beforehand and give approval for the exceeded power load

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