

JUMP STARTS DON'T HAVE TO BE A WAY OF LIFE. EFFECTIVELY ELIMINATE THEM WITH THE MAXWELL ULTRACAPACITOR ENGINE START MODULE (ESM)*



Starting reliability in today's trucks is more critical than ever. Whether you own one truck or a fleet, you can't afford down time due to dead or discharged batteries. The Maxwell Engine Start Module (ESM) makes jump-starts a thing of the past.

Don't leave starting to batteries. The Engine Start Module from Maxwell Technologies provides high power for hundreds of thousands of starts. With a four-year non pro-rated warranty it has the durability to start your truck consistently.

- Replace a battery or add the Engine Start Module to a Class 3-8 diesel truck for reliable starting from -40°F to +149°F (-40°C to +65°C)

ULTRA 31/1800 Engine Start Module

For Heavy Duty
(Class 7 - 8) Trucks



ULTRA 31/900 Engine Start Module

For Medium Duty
(Class 3 - 6) Trucks



FEATURES & BENEFITS*

- Replaces one Group 31 battery
- No lead. No acid.
- Improves overall system power performance
- Shock & vibration resistant
- Built-in overcharge protection
- Low total cost of ownership
- Cold weather reliability down to -40°F (-40°C)
- Faster cranking
- Industry standard BCI Group 31 form factor
- Recharges fully in less than 15 minutes (Initial charge is 30 minutes or less)
- Provides 900-1800 CCA¹
- 4-year non pro-rated warranty
- Assembled in the USA

*Lead acid batteries still power ECM/ECU. Results may vary. Additional terms and conditions, including the limited warranty, apply at the time of purchase. See the warranty details for applicable operating and use requirements.

MAXWELL ENGINE START MODULE: PRODUCT SPECIFICATION COMPARISON



	ULTRA 31/1800	ULTRA 31/900
Vehicle type	Heavy Duty (Class 7-8)	Medium Duty (Class 3-6)
Diesel engine size (displacement)	7 L - 16 L	4 L - 6.9 L
Cold cranking amps ¹	1800 CCA	900 CCA
Peak power ²	32.8 kW	16.4 kW
Input Voltage (B+ Terminal)	10 V - 18 V	
Output Voltage	15.0 V - 16.2 V (temperature dependent)	
Operating Temperature	-40°F to +149°F (-40°C to +65°C)	
Current draw (on batteries)	25 A (max. during charging) < 10 mA when charged (sleep mode)	
Recharge Time	15 minutes	8 minutes
Dimensions	BCI Group 31 13"L x 6 13/16"W x 9 7/16"H (330mm L x 173mm W x 240mm H)	
Weight	Net product weight: 19 lbs (8.7 kg) Shipping weight: 22.5 lbs (10.3 kg)	Net product weight: 13.5 lbs (6.2 kg) Shipping weight: 17 lbs (7.8 kg)
Shelf Life	4 years	

FOOTNOTES

1. $CCA = \frac{C \times (V_{max} - V_{min})}{T + C \times ESR}$

2. $Peak\ Power = \frac{V_{max}^2}{4 \times ESR}$

ULTRA 31/1800

C = 1000 F (min.)
 V_{max} = 16.2 V (for 0° C)
 V_{min} = 7.2 V (per SAE)
 T = 3 seconds
 ESR = 0.002 Ohm (max.)

ULTRA 31/900

C = 500 F (min.)
 V_{max} = 16.2 V (for 0° C)
 V_{min} = 7.2 V (per SAE)
 T = 3 seconds
 ESR = 0.004 Ohm (max.)

CONTACT US

Maxwell Technologies, Inc.
Global Headquarters
 3888 Calle Fortunada
 San Diego, CA 92123
 Phone: +1 (858) 503-3300
 Fax: +1 (858) 503-3301

ESM Sales Support: +1 (877) 511-4324
ESM Technical/Warranty Support: +1 (888) 890-3337
Email: esmsales@maxwell.com
Web: maxwell.com/esm

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