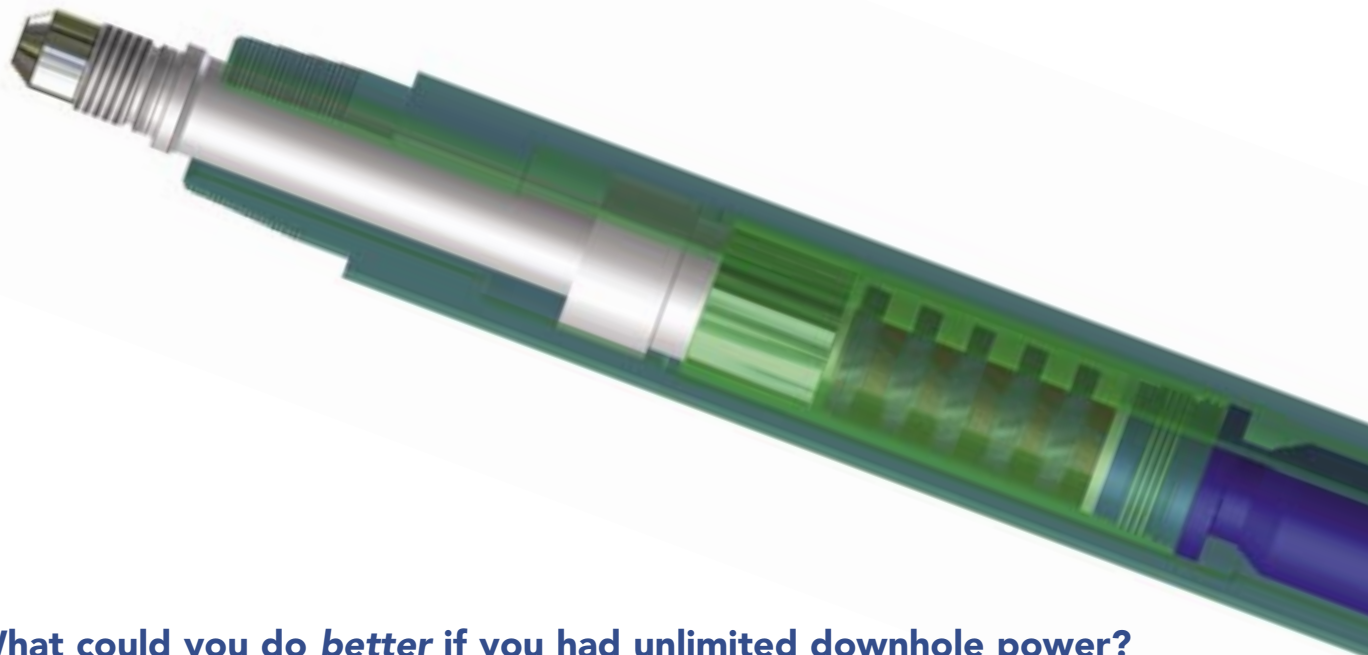


UnderCurrent™

Downhole Turbine Generator



What could you do *better* if you had unlimited downhole power?

Better depth of investigation? Higher definition? Stronger signals? New technologies? UnderCurrent™ Turbine Generator is a new wave in the downhole power market. UnderCurrent provides more power for less money than downhole Lithium Ion battery packs... PERIOD! Your downhole tools are no longer limited by the finite number of operational hours assigned to a battery pack. No more sacrifices in the quality or number of operations you need to perform downhole. When the mud pumps are on, UnderCurrent delivers!

Flexibility is the key to the UnderCurrent downhole generator system. The UnderCurrent downhole turbine generator platform itself is designed to deliver 200 watts of power at 200°C operation. You have the option of choosing our standard 48VDC regulated output that delivers 200 watts at 150°C, custom DC output to your specified voltage, or 200°C 3-Phase output for you to mate with your own rectification & regulation electronics. If your bottom hole instrumentation requires power while the pumps are off, our engineers can accommodate by packaging it with a small stay-alive battery pack to provide seamless switching and continuous power.

- ▶ No More Batteries
- ▶ No Rotating Seals
- ▶ Feed Through Conductors
- ▶ Designed For 4¾" Tool Diameter with Larger Sizes Available
- ▶ Wide Flow Range
- ▶ Field Maintainable Wear Components
- ▶ Oilfield Grade PDC Thrust Bearings
- ▶ Downhole Proven Reliability
- ▶ Environmentally Friendly-No Hazardous Waste

Dexter UnderCurrent™
Downhole Turbine Generator

Co-developed with
Noble Downhole Technology



UnderCurrent™ Offers Incomparable Features and Flexibility

Check out the options

No other single downhole power source compares to the list of features or the flexibility of UnderCurrent.

Comparison of Options for Downhole Power	UnderCurrent™	Batteries	HT Lithium Batteries
Low-Temperature Operation	●	●	
High-Temperature Operation	●*		●
High-Pressure Operation	●		●
Reusable	●		
Unlimited Downhole Life	●		
Non-Hazardous Waste	●		
High Power Density	●		

*Generator system is rated to 200°C. Our standard regulation electronics are rated to 150°C.

4¾" UnderCurrent™ Specifications	
Length	68"
Diameter	3½"
Flow Range	150-300 gpm (other ranges optional)
Turbine Speed	2200-3300 RPM
Voltage Output	48VDC (24VDC optional)
Current Output	4.5 Amps @ 48 VDC
Power Output	200 W
Temperature Limit	392°F/200°C (Custom), 302°F/150°C (Dexter's Standard)
Lost-Circulation Material	Medium Nut Plug