

Oil & Gas

Reliable - Powerful - Extreme

Extracting the earth's petroleum resources requires reliable power source technology. Lithium batteries used in the Oil & Gas industry must perform in extreme heat and pressure, survive pounding shock and vibration forces and often withstand corrosive environments. Electrochem® batteries provide dependable power on demand, extremely high reliability and peak performance in the harshest of environments. Major oil services companies and OEM suppliers around the globe rely on the Electrochem® brand to insure O&G production stays on schedule.

Extensive engineering and research allows Electrochem® batteries to deliver optimized performance in temperatures to +200°C with cell capacities of up to 40 ampere-hours. Advanced cell designs and assembly techniques insures Electrochem® products will continue to be regarded as the benchmark for safety and quality. Contact Electrochem® Power Solutions - "The Power to do Great Things" in today's petroleum applications.



Custom Power Solutions

- Custom engineered packs tailored for pulse and product-life cycle requirements
- Wide range of cells with a variety of terminations
- Built-in safety features
- Advanced, customized fuel gauge technology
- Quality designed and delivered

Extremely High Reliability

- Engineered for demanding shock & vibration applications
- Enhanced thionyl & sulfuryl chloride chemistries
- Surface-mount fuse & diode protection available
- Comprehensive qualification testing available
- UN/DOT certified for transportation
- ISO 9001:2000 certified facility

High Temperature Range

- Wide temperature performance from up to +200°C
- Proprietary construction & electrolyte chemistries for optimized restart
- Thermal expansion spacers available



CUSTOM POWER SOLUTIONS



High Rate Technology

Product	PMX 150 & 165	MWD 150	BCX 85	CSC 93
Chemical System	Chlorinated Sulfuryl Chloride	Enhanced Thionyl Chloride	Bromine Chloride Thionyl Chloride	Chlorinated Sulfuryl Chloride
OCV	3.9V	3.6V	3.9V	3.9
Rate Capability	Moderate	Moderate	Moderate to High	Moderate to High
Temperature	-40°C to +150 and -40°C to +165°C	0°C to +150°C	-55°C to +85°C	-20°C to +93°C
Applications	Moderate to high temperatures Downhole Petroleum Seismic applications	High shock & vibration capable Downhole Petroleum Pipeline applications	Capability Oceanographic, Military, Telemetry, Pipeline	Capability Oceanographic, Military, Telemetry, Industrial

Moderate Rate Anode Technology

Product	150 MR Series	165 MR Series	180 MR Series	200 MR Series
Chemical System	Thionyl Chloride	Thionyl Chloride	Thionyl Chloride	Thionyl Chloride
OCV	3.6V	3.6V	3.6V	3.6V
Rate Capability	Moderate	Moderate	Moderate	Moderate
Temperature	-40°C to +150°C	-40°C to +165°C	+50°C to +180°	+70°C to +200°C
Applications	Moderately high temperatures Downhole Petroleum	High temperature Downhole Petroleum	High temperature Downhole Petroleum	High temperature Downhole Petroleum

Bobbin Technology

Product	QTC Series	100 Series	150 Series	180 Series	200 Series
Chemical System	Thionyl Chloride	Thionyl Chloride	Thionyl Chloride	Thionyl Chloride	Thionyl Chloride
OCV	3.6V	3.6V	3.6V	3.6V	3.6V
Rate Capability	Low	Low	Low	Low	Low
Temperature	-40°C to +85°C	-40°C to +100°C	-40°C to +150°C	+50°C to +150°C	+70°C to +200°C
Applications	Memory backup	Telemetry, Industrial, Military, Medical	Temperatures Downhole Petroleum	Downhole Petroleum	Downhole Petroleum

