

## **Electric Submersible Pump (ESP) Drive Features**

- Constant-power operation above motor base speed
- Motor voltage, current, and frequency monitors
- Downhole motor/pump speed monitor and limiter
- Downhole motor/pump torque monitor and limiter
- Manual, preset, and remote speed control
- Pump speed optimization
- Operates without downhole pressure and surface flow sensors
- Optional downhole pressure and surface flow sensor inputs
- Pump flow monitor and production accumulator
- Programmable pump-off control
- Casing and tubing pressure compensation
- Pump intake and discharge pressure monitors
- Pump differential pressure monitor and limiter
- Gas interference monitor
- Fluid level monitor and control
- Cyclic and time-of-use energy optimizers
- Input power meter and energy efficiency monitor
- Input, motor, and lift power monitors
- Embedded drive, transformer, and cable models
- Embedded tubing, casing, and ESP models
- Density and flow loss calculations from fluid and gas properties
- Automated system parameter identification
- Standard RTU and ANSI serial communications
- Optional ControlNet, Modbus Plus, Profibus, and Ethernet protocols
- Time-stamped event and fault logging
- Optional multichannel analog data logging
- Interface software for Windows PCs and Palm OS handhelds