



The Revolutionary Modular System



SymbioTec is a revolutionary modular system for oilfield data acquisition. A complete data acquisition system includes a replaceable and interchangeable self-contained sensor Pilot and a standardized Carrier housing.

SymbioTec Pilots are complete self-contained units that include a fully calibrated sensor, data storage and acquisition electronics. Currently, they are available for measuring pressure and temperature (Pressure Pilot or Hot Shot Pilot) or just temperature (Temperature Pilot).

The sensor is welded in place and the Pilots are sealed in the Carrier using a metal crush ring resulting in improved reliability, requiring zero maintenance. Pilots of different pressure and temperature ratings are fully interchangeable within the same Carrier type; i.e. a Pressure Pilot at different pressure or temperature ratings can be interchanged with another Pressure Pilot in the same Carrier.

The SymbioTec Carrier is a standard, reusable housing for Pilots of different sensor ratings. The Carrier can be customized to fit any customer's tool string and application requirements.

Specifications for Pressure Pilot Tool		
General	Diameter	7/8"
	Length	3.5"
	Thread	7/8 - 24 TPI
	Wrench Flats	3/4
	Housing	Stainless Steel 17-4 or Hastelloy C 276
Seals	Diaphragm	Hastelloy C
	Sensor	Welded
	Carrier	Crush Ring
Pressure	Tightening Torque	100 ft-lbs
	Sensor	Piezo-Resistive
	Standard Ranges	750 psi, 1,500 psi, 3,000 psi, 5,000 psi, 10,000 psi, 15,000 psi or 20,000 psi
	Maximum Over	5% full scale
	Accuracy†	0.05% full scale
	Drift	Less than 3 psi per year
	Resolution	0.0003% full scale
Temp.	Response Time	Instantaneous
	Standard Ranges	120°C, 150°C or 177°C
	Accuracy	± 1.0°C
	Resolution	0.001% full scale
Power	Source	AA or C Cell Lithium Battery
	Voltage	3.2 to 4.6 VDC
	Current	2.0 µAh per sample
	Battery Life	Temperature dependent
Programming	Memory Capacity	500,000 records
	Record Contents	Time / Pressure / Temperature
	Sample Interval	1 second - 1 hour
	Program Segments	15
	Communications	Standard PC USB or RS 232 port
Software	Windows compatible	

