

# Data Acquisition Systems

## SURFACE EQUIPMENT

### Overview

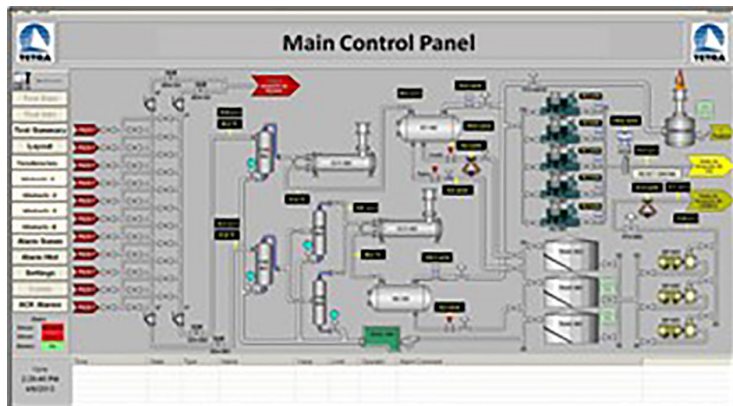
TETRA Data Acquisition Systems employ leading technology devices to monitor process parameters including pressures, levels, flow rates, valve positions and fluid characteristic. Data is captured on a local network and may be transmitted via data transfer carriers ranging from satellite, cellular, point to point micro-wave, and fiber optic transmission. TETRA employs custom engineered solutions that range from simple data capture and transfer, to integrated well test data acquisition systems and on to full scale integrated Supervisory Control And Data Acquisition (SCADA) systems with surveillance and intervention capability.

### Applications

- Onshore and offshore operations
- Well testing
- Flow back
- Early Production Facilities
- Wellhead monitoring
- Integration of surface and downhole data

### Features and Benefits

- Pressure sensors
- Temperature sensors
- Liquid flow meters
- Gas flow meters
- Density meters
- Water cut
- Gas monitoring
- Radar-level control
- Wireless options



Data Acquisition Screen





## Equipment Specifications - Data Acquisition Systems

	Range	Type
Wellhead Pressure	15,000 psi	Quartz
Wellhead Temperature	400°F	Thermocouple
Casing Pressure	15,000 psi	Strain
Temperature Sensors	250°F	Thermocouple
Pressure Sensors	10,000 / 5,000 / 2,000 / 600 psi	Strain
Level Controllers	0 – 100%	Radar
Liquid Turbine Meters	2,200 / 6,000 / 20,000 bpd	Rotary
Liquid Mass Flow Meters	2" 3" 4"	
Gas Meters	Differential Meters / V-Cone / Mass Flow Meters	
Level Switch	99.0%	Density/Float
Pressure Switch	1,750	Electronic
Gas Monitor	7,800	H <sub>2</sub> S / LEL / CO <sub>2</sub>
Water Cut	External Device Signals	
Chromatograph	External Device Signals	
Salinity	External Device Signals	
Sand Monitor	External Device Signals	
Downhole Tool Interface	External Device Signals	
Data Connections	Cellular / Satellite / Ethernet / P2P Radio	

Note: TETRA uses devices from multiple third-party vendors so as not to limit the service capability, Please enquire regarding specific applications and conditions.