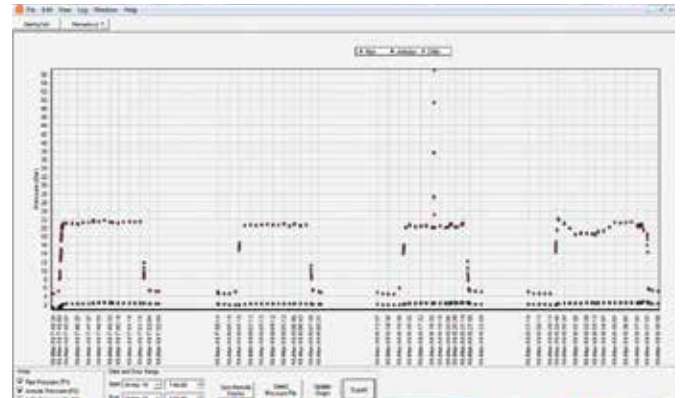
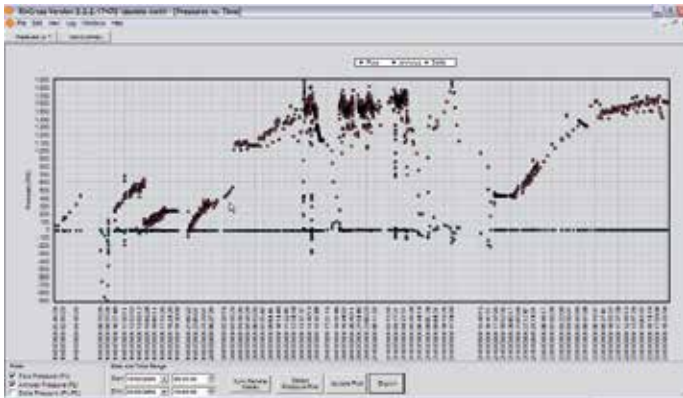




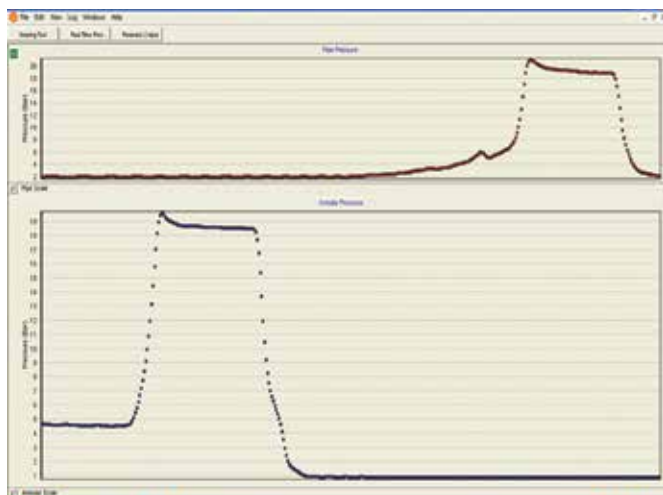
A Pressure Module is used to measure downhole pressure. It gives real-time measurements of mud pressure both inside the drill pipe and in the annulus just behind the drill bit. Pressure measurements are taken behind the bit when jetting. When using a mud motor the pressure is measured directly behind the mud motor.



Examples of a post-job PWD drilling charts

The pressure data is monitored and stored by the standard RivCross software used with the ParaTrack-2 system. The pressure can be viewed in real time. It is also stored for later use. The software allows easy graphical representations of pressure variations with time, an example of which is shown (above left). Alarms can also be set in the software and will trigger if pressure limits are exceeded during drilling.

Because it is capable of giving a rapid indication of an increase in downhole pressure, the measurement of pressure while drilling is an effective technique to reduce the risk of bentonite (drilling mud) breakout during the drilling process. It can also help ensure that a drilled hole is kept clean and free of blockages, thus reducing operational risks.



### Specifications\*

- Outside Diameter: 1.75"
- Length: 35.5" (902mm)
- Borehole Annulus Gauge: 0-1,000 psi Full Scale, 3,000 psi survival, 5,000 psi burst
- Drillpipe Gauge: 0-3,300 psi Full Scale, 10,000 psi survival, 10,000 psi burst
- Non-linearity: +/- 0.1 % FS
- Hysteresis: +/- 0.015% FS

\*\* (Pressure Module only – requires separate Pressure Gravity or Steering tool and pressure orienting sub) \* Centralizers available in custom sizing