



CaTS™ EMX

Smarter and greener approach to reservoir evaluation and monitoring.

The next generation of downhole wireless gauges. Expro's Cableless Telemetry System (CaTS) is a field-proven, battery powered wireless transmission system that provides operators with valuable data from new or existing wells that can reduce reservoir uncertainty, allow reserves to be exploited optimally, maximize production and offer improved safety throughout the well lifecycle.

CaTS™ EMX uses the same established duplex electromagnetic (EM) technology but delivers more data, for longer durations and operates at higher temperatures.





Exploration and Appraisal Long Term Monitoring

CaTS™ EMX roars with reservoir data.

Expro's EMX system enables suspended and abandoned wells to be converted into high-value long term monitoring assets for years after the rig has left location. Dynamic reservoir pressure responses are monitored during drilling, testing and production in the field to capture cross-field interference and long term pressure build-up data. The data provides critical information about the connected volumes in order to characterize the reservoir, validate subsurface models and refine the field development plan. The system can be run on its

own or as part of a DST test string and the Duplex functionality allows for optimal battery management, ensuring the right data is delivered at the right time.

Applications:

- Reservoir Surveillance
- Cross Field Interference Monitoring
- Zonal Interference Monitoring
- Long Term Extended Pressure Build Up Monitoring
- Extended Well Testing
- Abandoned Pilot hole and side track Monitoring



New Development and Retrofit Production Well Monitoring

CaTS™ EMX keeps eyes on your wells.

By installing a CaTS wireless gauge into the well it is possible to introduce or restore downhole P&T monitoring to increase the understanding of downhole conditions. The system can be installed in static observation wells for reservoir surveillance and regulatory compliance and in flowing wells for production optimisation. CaTS gauge can be retrofit into existing wells to reinstate critical P&T measurements or run as part of new completions. The CaTS system can be combined with Expro's cabled gauges to provide a cost-effective and innovative hybrid solution

to monitor and control remote and isolated zones.

Applications:

- Production Optimization
- Artificial Lift Optimization
- Gas Storage Monitoring
- Reservoir Surveillance
- Extended Production and well tests
- Failed Permanent Gauge Replacement
- Reservoir pressure control and water injection management
- Multi-zone and Multi-lateral Completion Monitoring



Well Integrity Monitoring

CaTS™ EMX protects the pride of wells.

Installing a CaTS EMX wireless P&T gauge below a barrier or within an isolated zone enables immediate verification and long-term qualification of wellbore barriers and plugs to provide enhanced well integrity assurance. The high accuracy data can be used to detect the smallest pressure changes over time to prove sealing reliability. The CaTS EMX gauges can be retrofit into existing wells on wireline or run clamped onto new casing and completions

Applications:

- Real-time wellbore barrier verification
- Long term monitoring of suspended well prior to re-entry for final abandonment
- Qualification of new and alternative barriers and plugs
- Behind casing pressure monitoring
- Annulus pressure build-up in A, B and C annuli
- Carbon Capture and storage integrity monitoring



Want to reduce reservoir uncertainty during exploration and appraisal?

CaTS™ EMX hunts down well data.

CaTS EMX monitors dynamic reservoir pressure responses during drilling, testing and CO2 injection in the field to capture cross-field interference and long-term pressure data within the CO2 storage complex. Further uses are plume migration and pressure front tracking, well and formation integrity assessments and leak/fluid migration detection during the CO2 injection phase. At the end of operations, CaTS EMX gauges can be installed in abandoned wells to help achieve a key objective of monitoring the reservoir post cessation of injection, which can support wider plans for reporting and regulatory compliance.

Applications:

- Injectivity testing
- Pressure build up monitoring
- Interference Monitoring
- Convert legacy wells into CO2 Monitoring assets
- Plume Migration and pressure front Monitoring
- Well and formation integrity assessment
- Injection phase fluid leak / migration detection
- Long term storage monitoring post injection phase
- Regulatory Compliance