

The OCULUS gauge records pressure and temperature precisely, it is rugged and able to transmit high resolution data for DST operations and production wells.

DESCRIPTION & BENEFITS

OCULUS is extremely stable with low drift and excellent repeatability. It is suitable for transient analysis during DSTs, but has very low power consumption and will work for many years in production wells.

With the PARAGON system, and duplex control, the OCULUS can be reprogrammed from surface. This allows high time resolution data to be captured and analysed. An example of this is perforating, when under balanced features are revealed in a fraction of a second, and presented at surface for instant examination.

Metrol has used OCULUS for:

- > stimulation & fracing
- > acid jobs
- > gravel packs
- > DST Transient analysis
- > leak detection
- > zonal isolation
- > packer integrity
- > barrier integrity
- > plug integrity

FEATURES & SPECIFICATIONS

| Model | Oculus (ST) | Oculus (HT) | Oculus (XT) |
|-------------------------|------------------------------------|------------------------------------|------------------------------------|
| Max Temp °C [°F] | 150° [302°] | 177° [350°] | 192° [377°] |
| Min Temp °C [°F] | -20° [-4°] | 0° [32°] | 0° [32°] |
| Max duration @°C | >7y @100 >5y @130 >1y @150 | >120d @165 >80d @177 | >40d @185 >21d @192 |
| Pressure Ranges | 10k, 16k, 20k, 25k (psi) | 10k, 16k, 20k, 25k (psi) | 10k, 16k, 20k, 25k (psi) |
| Pressure Accuracy | +/- 0.025% of Full scale | +/- 0.025% of Full scale | +/- 0.025% of Full scale |
| Pressure Resolution | 0.0008psi (1 sec sampling) | 0.0008psi (1 sec sampling) | 0.0008psi (1 sec sampling) |
| Pressure Drift @ 20°C | Negligible | Negligible | Negligible |
| Pressure Drift @ FS P/T | 0.02% FS / year | 0.02% FS / year | 0.02% FS / year |
| Temperature Accuracy | +/- 1C | +/- 1C | +/- 1C |
| Memory capacity | 4,500,000 data samples (P+T) | 4,500,000 data samples (P+T) | 4,500,000 data samples (P+T) |
| Length | dependent on duration required | dependent on duration required | dependent on duration required |
| Diameter | 1.25" (1.37" ext'd duration) | 1.25" (1.37" ext'd duration) | 1.25" (1.37" ext'd duration) |
| Sample Rates | Programmable inhole 1/64s -120s | Programmable inhole 1/64s -120s | Programmable inhole 1/64s -120s |
| Paragon Enabled | Yes | Yes | Yes |
| Temperature Resolution | <0.005°C/ 1 second | <0.005°C/ 1 second | <0.005°C/ 1 second |
| Temperature Drift | <0.1°C / Year | <0.1°C / Year | <0.1°C / Year |

