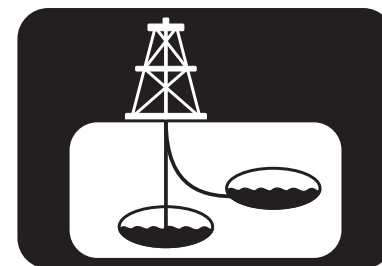
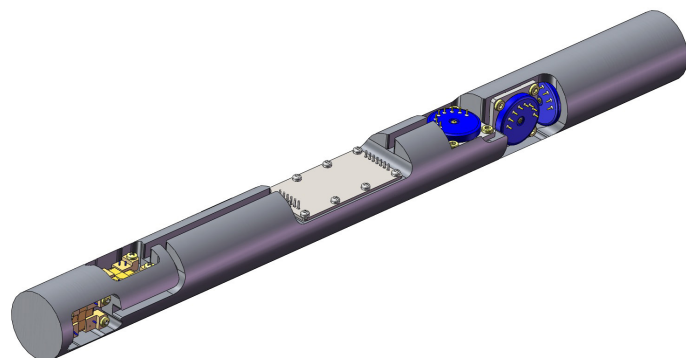


Analog Directional Module



Applications

Designed for extreme downhole applications including directional and horizontal wells.

Manufactured in-house using our own sensor technology we have created a range of directional modules for easy integration to MWD, LWD and Wireline tools. Each module is fully calibrated by JAE to ensure reliable measurements down hole. MCM technology is used extensively throughout our directional modules to ensure long term reliability in harsh environments.

An extreme product for extreme applications.

Key features

- High accuracy quartz accelerometers
- Survey grade fluxgate magnetometer
- Analog outputs
- Full calibration data provided
- Operating temperature to 200 °C
- Highly reliable MCM electronics
- High shock and vibration resistance
- Compact design

To support OEM integration we can offer custom chassis designs. Contact your local support team to discuss your requirement.

Technical data

Directional modules must only be exported in accordance with all relevant regulations.

| Environmental | | | | |
|-------------------------|--|--------------------------------|-------------------|-------------------|
| Temperature | Operating | -20 °C to +175 °C | -20 °C to +185 °C | -20 °C to +200 °C |
| | Survival | -40 °C to +185 °C | -40 °C to +195 °C | -40 °C to +210 °C |
| Vibration | Random | 20 Grms, 10 Hz - 500 Hz | | |
| Shock (1 ms, half sine) | Operating | 500 G | | |
| Electrical | | | | |
| Operating voltage range | ±12 V _{DC} to ±15 V _{DC} | | | |
| Power consumption | ±50 mA | | | |
| Mechanical | | | | |
| Length | 457.2 mm (18") standard * | | | |
| Diameter | 34.9 mm (1-3/8") standard * | | | |
| Performance | | | | |
| Magnetometer | Bias (@ 25 °C) | ±500 nT | | |
| | Scale factor (@ 25 °C) | 60 µV/nT * | | |
| | Dynamic range | ±0.1 mT (±1 Gauss) | | |
| Accelerometer | Bias (@ 25 °C) | ±15 mG | | |
| | Scale factor (@ 25 °C) | 3 mA/G (voltage out available) | | |

* Customization available

1 G = 9.80665 m/s²

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More accelerometers from JAE



JA-5 series
Φ25 mm



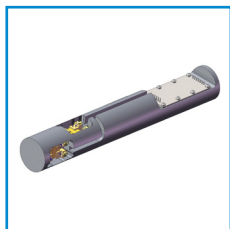
JA-25 series
Φ19 mm



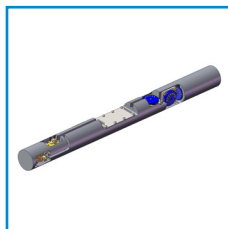
JA-35 series
Φ15 mm

For more information on
these products and other
product ranges visit
www.jae.com/aero

More downhole products from JAE



Magnetometers



Directional Modules

Document revision table

| Document number | Issue | Revision date | Changes |
|-----------------|-------|---------------|--------------|
| AnalogDM_DS | 01 | 01/03/2016 | New document |

JAE reserves the right to modify specifications without prior notice.