

# iDM

## Intelligent Directional Module

# Another Powerful MWD Advancement from Tolteq

60.73"

Tolteq's iDM (Intelligent Directional Module) raises the bar with legacy compatibility and advanced features. Engineered to the highest possible standards—so you can be confident your downhole tool is always performing at its best.

### Features

- Operational time and environment history recorded in internal memory\*
- On-board rotation detection
- Shock, vibration & RPM pulsed to surface in real time
- Addition of new rotation sequence
- Advanced internal logging\*
- Internal current usage logged to memory\*
- Smart power management—efficient battery switching and logging of voltage and current
- Fluxgate magnetometers
- Quartz-flexure accelerometers
- Legacy compatible
- Enhanced circuit protection
- Calibration coefficients included directly into module memory
- Quality Tolteq wiring inside with strain relief connectors and high-temperature mesh covering for wires
- Shorter, more rugged design

\*Requires Tool Tracker™ to download

### Electrical Specifications

- Operating Voltage Range: .....10V-30V
- Current @ 28V:.....100mA Max, 10mA Idle
- Sensor power management through firmware
- Power usage: .....0.25W Idle, 3W Peak



Transforming downhole data into downhole intelligence

1205 BMC Drive  
Cedar Park, Texas 78613

Tel: 512.331.4241  
www.tolteq.com



500406 B

# A Powerful and Advanced Directional Module

Tolteq's iDM (Intelligent Directional Module) incorporates the latest advancements in downhole electronics. Take advantage of advanced logging features and a shorter design.

### Mechanical & Environmental Specifications

Parameter	Minimum	Maximum	Units
• Outside Diameter		1.875 0.047	Inches m
• Length (w/end caps)		60.73 1.54	Inches m
• Operating temperature	32 0	175 347	°C °F
• Survival temperature	-40 -40	185 365	°C °F
• Vibration, Random	20g RMS 10-200 Hz		
• Shock	1000g. 0.5mSec. half-sine		

### Instrument Accuracy Specifications

Parameter	Accuracy
Inclination:	
• Absolute	±0.1°
• Spread	±0.1°
Azimuth (Magnetic dip angle at <70°):	
@ 5° inclination: Absolute	+/-1.2°
@ 5° inclination: Spread	+/-1.0°
@ 10° inclination: Absolute	+/-1.0°
@ 10° inclination: Spread	+/-0.75°
@ 90° inclination: Absolute	+/-0.5°
@ 90° inclination: Spread	+/-0.5°
Tool face accuracy, axial rotation, 10 through 90 inc	±1.0°
Total g field accuracy, absolute	±5.0 mG
Total H field accuracy, absolute	3.0 mguass
RPM measurement, 10-255 RPM	±0.5% of value



Transforming downhole data into downhole intelligence

