



QDT MODULE

MPU-35A

MASTER PROCESSING UNIT

185°C

The MPU-35A is the latest development from Azimuth, incorporating the MPU and TPS functionality for Tensor based MWD systems within a short chassis. Qualification and calibration to 185°C ensures performance in the most demanding 'hot-hole'-applications.

Fully compatible with QDT-based orientation modules including Azimuth's DOM-35A sensors.

Combined with the latest features such as high speed telemetry and CAN bus for fast download, QBus support and M-Ary telemetry, the unit delivers the latest features with a cost-effective upgrade path from legacy modules to the user.

The MPU-35A module is qualified and tested under the same rigorous conditions expected of all Azimuth sensors and is fully compatible with existing Tensor based MWD systems.

M-Ary Mud Pulse Encoding

Continuous Inc/Azi

High-Speed Telemetry

Azimuthal Gamma

MWD Features

- Short chassis
- Low power consumption
- QBus compatible
- CANBus for fast download
- Flow/Rotary Downlink
- Dual Gamma supported
- 3-Axis Shock/Vibration
- RPM & Stick/Slip Detection
- Voltages/Currents/Events logging
- Gamma power switching
- Deep sleep mode for in-collar loadout with INC/RPM wake-up
- Generic variables for 3rd party connectivity
- Alternative communications: UART/RS-485
- 18-50VDC Input Voltage
- Customisation available

Applications

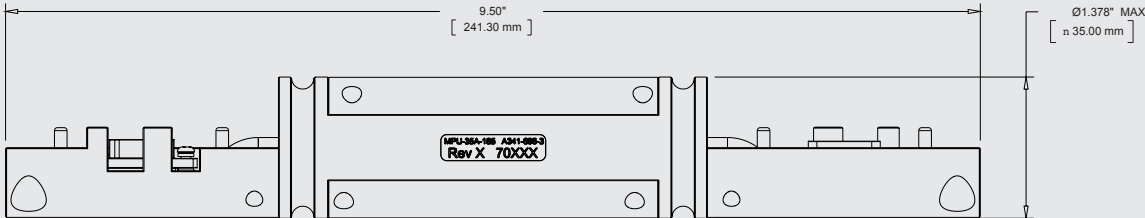
- MWD/LWD Borehole Survey
- Geothermal applications
- Tensor/QDT Toolstring compatible



Quality, precision and reliability.

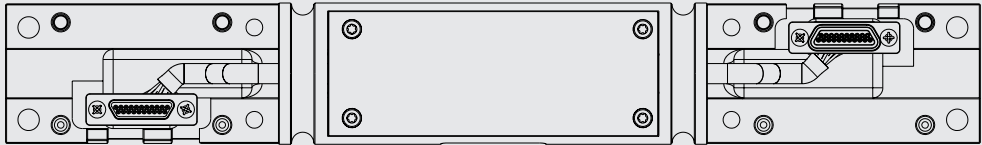
www.azimuthmwd.com

Description	Value	Units	Comments
Electrical			
Operating Voltage	+18 to 50	Volts	
Active Power Consumption	0.9	Watt	
Quiescent Power Consumption	0.3	Watt	
Deep Sleep Power Consumption	0.1	Watt	
Sensor ADC Resolution	24	bits	
Processor	32-Bit ARM		
Memory			
Size	256	MB	
Diagnostic Recording	Survey, Drilling Dynamics, Power and Gamma		
Interface			
Communication Bus	QBus, Proprietary CAN		UART, RS485 optional
Gamma	2 Inputs		Bulk or focused gamma
Mud Pulse	M-Ary Encoding		Fast pulse (0.125s PW) supported
Mechanical			
Length	9.5	Inches	
Diameter	1.378	Inches	Excludes lateral o-rings
Weight	0.7	lb	
Environmental			
Operating Temperature	-25 to 185	°C	
Survival Temperature	-40 to 200	°C	
Vibration	50	g rms	50 -1000Hz
Shock	2000	g	50 -1000Hz



Uphole MDM Orientation

Downhole MDM Orientation



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Product Support

Azimuth Oilfield Systems Ltd. provides a responsive repair, calibration and product support service. Experienced personnel are available to troubleshoot or repair equipment, and provide general product technical assistance. If you need effective sensor support for your business, then contact support@azimuthmwd.com for more information.

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