

Features

- ATEX Zone 1 rating
- Single Connection for power & comm.
- Configurable Displays
- Light Weight
- Rugged and Sealed
(Made for Rig floor environment)
- RoHS Compliant

The Azonix Drilling Unit (ADU) was developed as a cost effective directional drilling display to help the driller validate the azimuth and inclination. Sporting a large rose dial showing the last four tool readings at five degree increments and a clean tool face display that can be read from over 15 feet away, the Azonix ADU will help reduce errors and minimize operator fatigue. The ADU has four configurable displays that can be programmed to show any relevant drilling data. The bottom display is fully alpha-numeric and can support a wide variety of messages to the operator on the rig floor to avoid costly mistakes.

The ADU is designed for quick rig up / rig down requiring only one connection that includes both power and communication. An ergonomic handle enables easy transport of the light weight unit as well as a variety of mounting options. With over sixteen years of experience developing products for the rig floor, Azonix has designed the ADU to meet the shock, vibration and contamination exposure requirements of this harsh environment.

The ADU is another solution within the Azonix integrated HMI product lines for the rig floor. Meeting the ATEX Zone 1 global hazardous area certification, we have also designed and manufactured the system to meet the European Union RoHS directive. Azonix continues to drive product leadership in the oil and gas exploration market integrating intrinsic safety, electronic packaging with application know-how resulting with valued solutions for our customers.



Directional Drilling Rose Dial



Azonix Drilling Unit Interface



All input signals are isolated for intrinsic electrical safety using an approved barrier. All electrical and mechanical components of the ADU are compliant with the European Union Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment, 2002/95/EC (RoHS). The ADU includes an ambient light sensor to recognize the difference between day and night ambient light conditions. In day mode, the LEDs shall be illuminated to full brightness when they are active. In night mode, the LEDs shall be illuminated to a relatively low brightness level when they are active. The threshold between day and night modes is 10 lux.

ADU Specifications

Toolface Display	.5" High, 5:1 Contrast Ratio
Multifunction Display	.4 " High, 5:1 Contrast Ratio
Rose Dial Display	Color: Green, outermost ring,(most current data) Yellow: 3 inner most rings (historical data)
Toolface Resolution	5 degrees
Communication Interface	RS232 or RS485 auto detect
Ambient Light Sensor	Day / Night detection
Communication Protocol	Custom
Power Input Voltage	10 to 14 VDC
Enclosure Rating	NEMA4
Shock	40G, 11 ms pulse with 3 axis
Vibration	2G peak to peak, 10-600Hz . 3 axis
EMI & Safety	FCC/CE Class A, IEC1 Zone 1, ATEX: Zone 1
Operating Temperature	-20°C to 50°C ; Storage -40°C to +70°C
Housing	Aluminum
Input power & signal barrier	MTL765
Connector	Default: Turck RSFVL 56 w/In
Mounting	Rear VESA 75, Handle mount
Dimensions	16.75" x 10.09" x 2.58"
Weight	7 Lbs
Backlight	for low ambient light via a secondary barrier

VESA Mount

