



### iANARO-mini

## **Your Source for reliable Solutions**

## HORIZONTAL DIRECTIONAL DRILLING

#### **SURVEY PRECISION**

Gyro		
Azimuth	0.10 deg *	
Pitch	0.05 deg	
Toolface roll	0.10 deg	
3D Magnetic (microcoil)		

#### wagnetic (microcoli)

Magnetic 3D-accuracy 1 % of depth

#### **INCLUDED FEATURES**

Pr	essure	sensor

Annular pressure 100 bar

#### **One wire PowerLine communication**

PowerLine voltage 48 V
Minimum length up to 3'000 m
Connection type wet connector

#### **TECHNICAL SPECIFICATION IANARO-MINI**

with BHA (Bottom Hole Assembly)		
Outside diameter	127 mm (5")	
Overall length	800 mm	
IF box	3.5"	
IF pin	3.5"	
Maximum mud flow rate	600 l/min	
Maximum pressure	100 bar	
Temperature (sensor)	-10 71 °C	
Weight	~40 kg	

<sup>\*</sup> Gyro compassing depends on the rotation rate of the earth and therefore depends on the local latitude. The achivable precision increases in direction of the equator and can be calculated by: accuracy = 0.1 deg / cos (latitude)



iANARO-mini

**i**ANARO-HP

## **iMAR Navigation GmbH**

Im Reihersbruch 3 D-66386 St. Ingbert

sales@imar-navigation.de www.imar-navigation.de

Lon 7.159663° E • Lat 49.273880° N • Alt 311.9 m

DOC240119017 / rev. 1.07 / technical modifications reserved





## **i**ANARO

# Complete system components

# TrueGyde

For more than **30 years iMAR is a leader** in developing most precise and robust inertial navigation systems.

Since more than 20 years, iMAR manufactures the leading ultra precise tools for horizontal and vertical borehole surveying and drill head steering for directional drilling (HDD). iANARO-mini is the latest generation of a most robust gyro based drillhead steering tool, made of state of the art and robust technology. It uses a unique technology to provide precise information in order to determine the position and attitude of the drillhead in realtime.



The system provides a **very accurate, true north** related heading and pitch information (azimuth and inclination), even under very harsh environmental conditions, up to **hard-rock drilling** and high rotation rates around the drill rod.

Furthermore, it provides environmental and operational information, like temperature, pressure, battery and health status.

#### **CONTENTS OF IANARO-MINI SYSTEM**

- (1) iANARO-mini GYRO steering tool (AMD)
- (ACB) iANARO-mini ground control box (ACB)
- (3) iANARO-mini control software

#### **OPTIONAL:**

- 4) 3D high precision magnetic sensor
- 5 TrueGyde software



In combination with the **TrueGyde** steering software, **iANARO-mini** can be **used right away** for planning steering and documentation. TrueGyde Systems bore planning and navigation was developed more than 10 years ago in Canada in order to provide enhanced support for the latest generation of magnetic steering tools. The TrueGyde system has since become **a global leader in HDD** navigation systems. It is compatible with all leading tools in the industry.

