TILT SENSOR

FEATURES

- Dual Axis Tilt Sensing
- Refresh Rates - 1 / 5 / 10 / 50 Hz
- RS232 and RS485 ASCII and MODBUS Output
- Stability over time and temperature range
- Compact & Low Power
- Industrial Grade

APPLICATIONS

- Angle and Tilt Sensing
- Solar Tracking
- Robotics
- Platform Stabilization
- Platform Leveling
- ATM safety

VEGA TS2D

DESCRIPTION

The VEGA, VEGA-TS2D model is a dual-axis, compact and robust industrial grade tilt sensor. The VEGA-TS2D can be used in static and harsh environments as factories, automotive or construction sites.

The VEGA-TS2D employs solid state MEMS accelerometers for gravity level sensing. It uses advanced statistical filtering algorithms and digital signal processing to deliver inclination data about longitudinal (X) and lateral (Y) axis. VEGA-TS2D has low noise industrial grade accelerometer with low temperature dependence which makes it an ideal choice for OEM applications. The output is available in flexible selectable data rate.

The VEGA-TS2D provides output (digital formats - RS232, RS485 ASCII and MODBUS RTU) and in static or non-accelerated environment. The device comes with an industrial grade circular M8 connector aiding the compatibility of the device over a wide range.

VEGA-TS2D is suitable for solar tracking, safety load indication, robotics, marine and other static or non-accelerating platform leveling applications.

TECHNICAL SPECIFICATIONS

Parameter Name	Parameter Value		
	VEGA		
	TS2D		
Performance			
Measurement Range	±180˚ (X-axis) ±60˚ (Y-axis)		
Resolution	0.01˚		
Accuracy[1]	±0.2˚ (1σ)(static)		
Update rate*	1 Hz, 5 Hz, 10 Hz, 50 Hz		
Electrical			
Power Supply	+9 to +28 VDC		
Current consumption	< 100 mA @ 12V		
Interfaces	RS232, RS485		
Protocols	ASCII, MODBUS RTU		
Baud Rate	9600, 19200, 38400, 56700, 115200		
Environmental			
Shock Survival[2]	20 g		
Environmental Sealing	IP65		
Operating Temperature	-40˚C to +85˚C		
Mechanical			
Size	88 mm (L) x 58 mm (W) x 37 mm (H)		
Weight	<300 gms		
Casing Material	Aluminum		

1 - TS2D - Calibrated over the entire temperature range
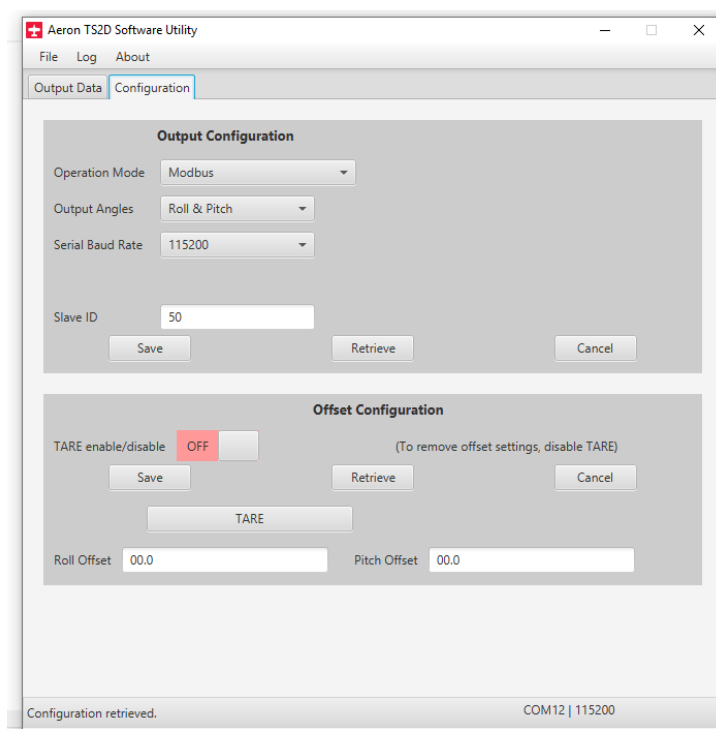2 - Acceleration due to gravity
* - Configurable

DESKTOP APPLICATION

TS2D comes with a desktop software suite, for configuration and output data.

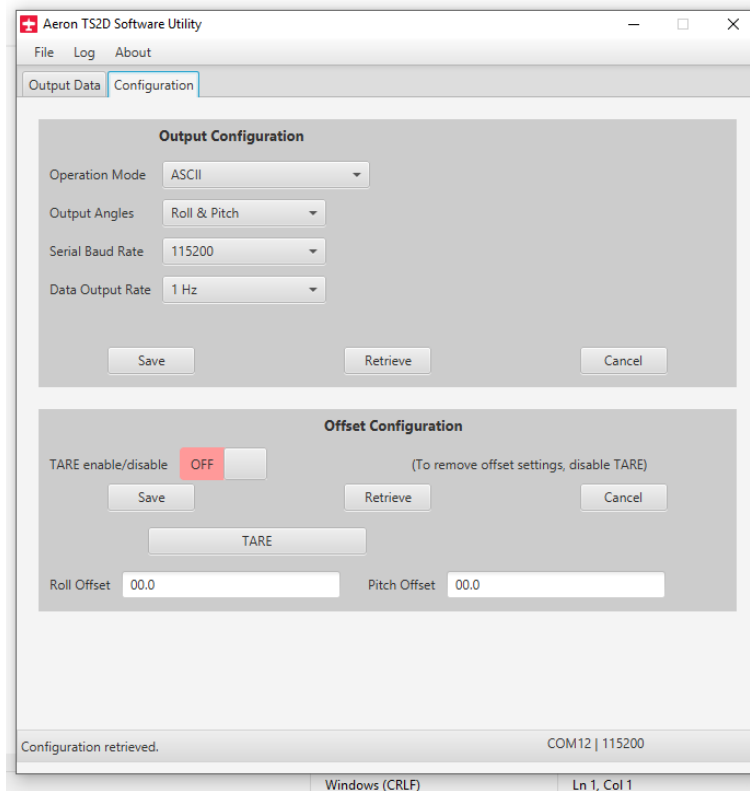*Note: These images of the software suite are for reference.*

MODBUS Configuration

MADE IN INDIA
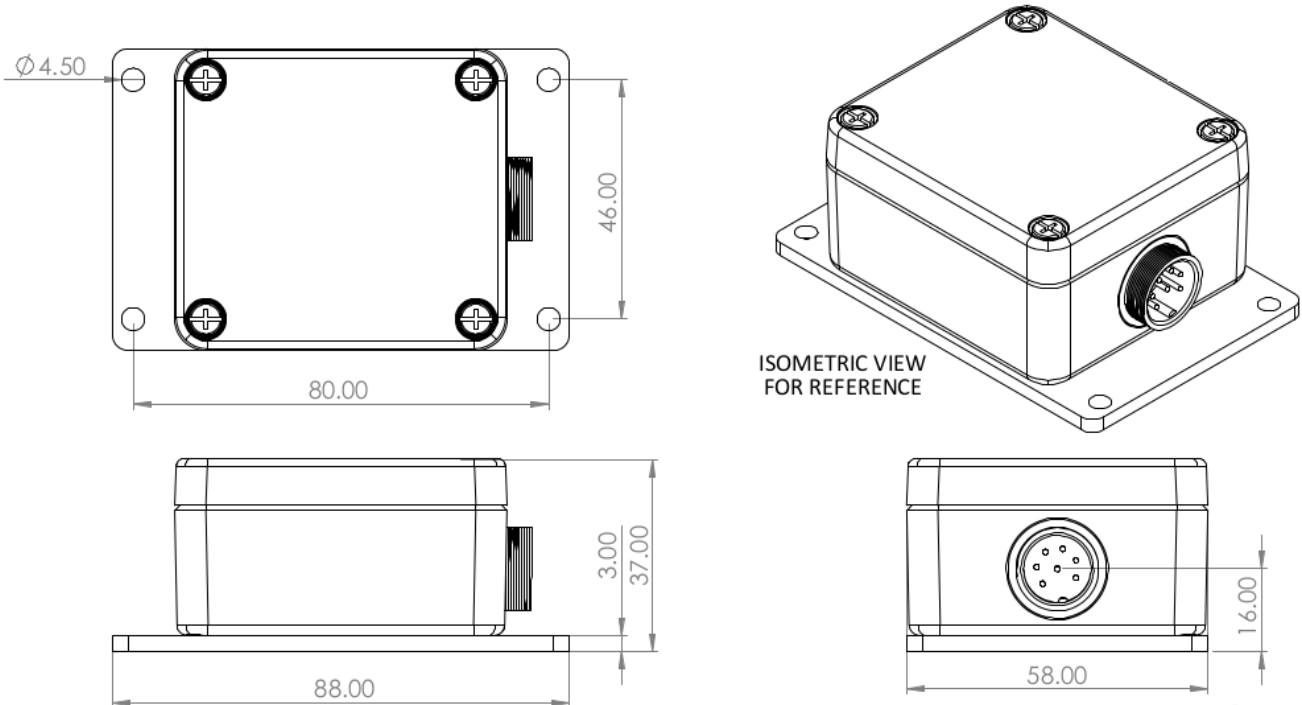
Datasheet Ver. 2.0.11, Nov 2019

ASCII Configuration

Output Data

MECHANICAL DIMENSIONS

All dimensions in mm

Ø 4.50

46.00

80.00

ISOMETRIC VIEW
FOR REFERENCE

3.00   37.00

88.00

16.00

58.00

ORDERING INFORMATION

VEGA - TS2D   (Product Code:14001)