

THE MEDUSA

Ultra-sensitive force torque sensor for limited space and payload

- ✓ Negligible temperature drift
- ✓ High impact robustness
- ✓ Noise level better than 0.01% of nominal range
- ✓ Up to 1000 Hz update rate
- ✓ Enhances your robot with the sense of touch
- ✓ Precise contact force detection
- ✓ Path recording through hand guiding, high tolerance assembly
- ✓ Plug & Play



WE GIVE MACHINES THE SENSE OF TOUCH

APPLICATIONS



Aerial manipulation



Robotic assisted surgery



Finishing



Precision Assembly



EtherCAT

TECHNICAL SPECIFICATIONS

Serial

Game - Changing 6-Axis Force Torque Sensor for automation and robotics industry. Its USB or RS422 output can deliver up to 800 samples per second. It is integrated with electronics in a very compact, dust-proof and waterproof package. An innovative product that delivers high quality measurements at a hard to compete price point

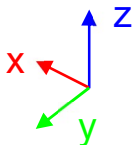
Industrial Premium *lightweight* 6-Axis Force Torque Sensor integrated with IMU for advanced applications in automation and robotics industry. Its EtherCAT output can deliver up to 1000 Samples per second. It is integrated with a 6-DoF IMU, Temperature sensors, IP67 and a big range of power supply from 9 to 70 V

Range (F_{xy} , F_z , M_{xy} , M_z)	200 N, 500 N, 5 Nm, 5 Nm	200 N, 500 N, 5 Nm, 5 Nm
Overload (F_{xy} , F_z , M_{xy} , M_z)	1000 N, 2000 N, 12 Nm, 15 Nm	1000 N, 2000 N, 12 Nm, 15 Nm
Noise free resolution	0.03 N, 0.01 N, 0.0004 Nm, 0.0001 Nm	0.03 N, 0.01 N, 0.0004 Nm, 0.0001 Nm
Weight	110 g	110 g
Size (DxL)	48 x 32 mm	48 x 32 mm
Communication	USB, RS422/RS485	CANopen over EtherCAT
Sampling rate (max.)	800 Hz	1000 Hz
Ingress Protection	dustproof and waterproof	dustproof and waterproof
Accel	-	±2g, 4g, 8g, 16g,
Gyro	-	±250°/sec, ±500°/sec, ±1000°/sec, ±2000°/sec

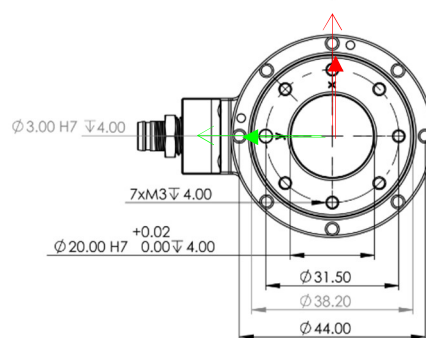
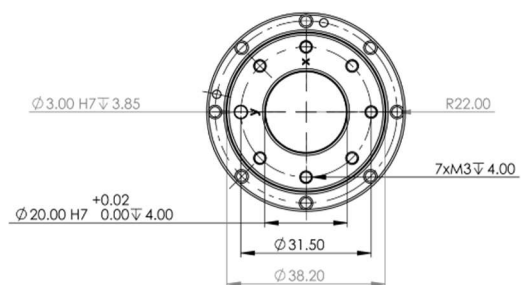
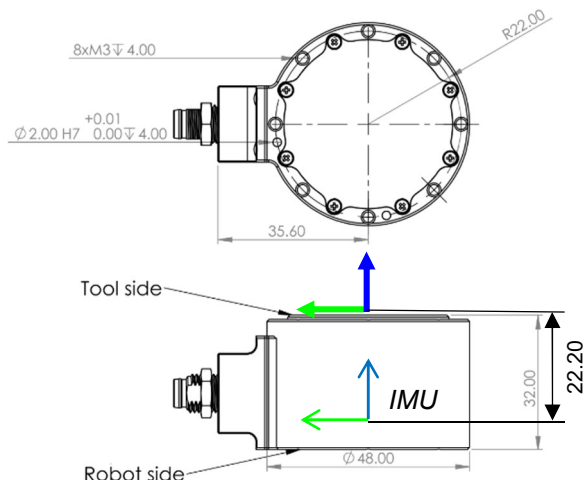
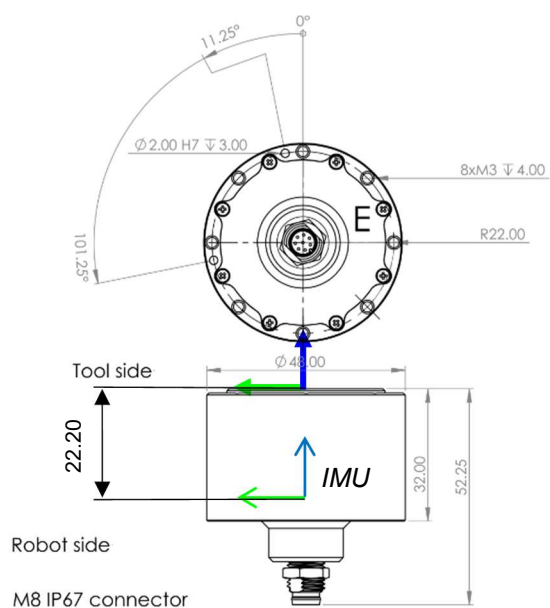
OVERVIEW

Axial connector

Side connector

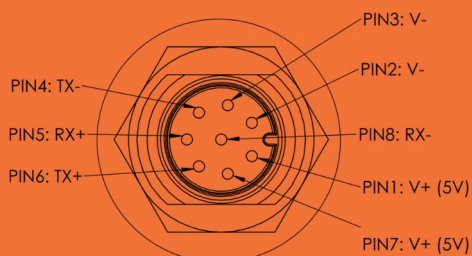


MECHANICAL DIMENSIONS

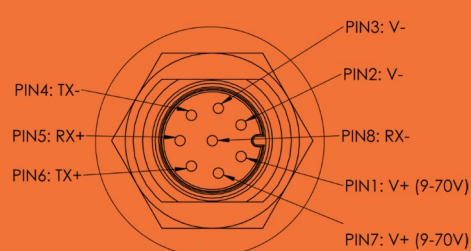


M8 Connector Pinout

Serial



EtherCAT



Power Supply

5 V, 1.0W

9 – 70 V, 1.5W

Operating temperature

0 – 55 Celsius

0 – 55 Celsius

Communication

USB, RS422

CANopen over EtherCAT