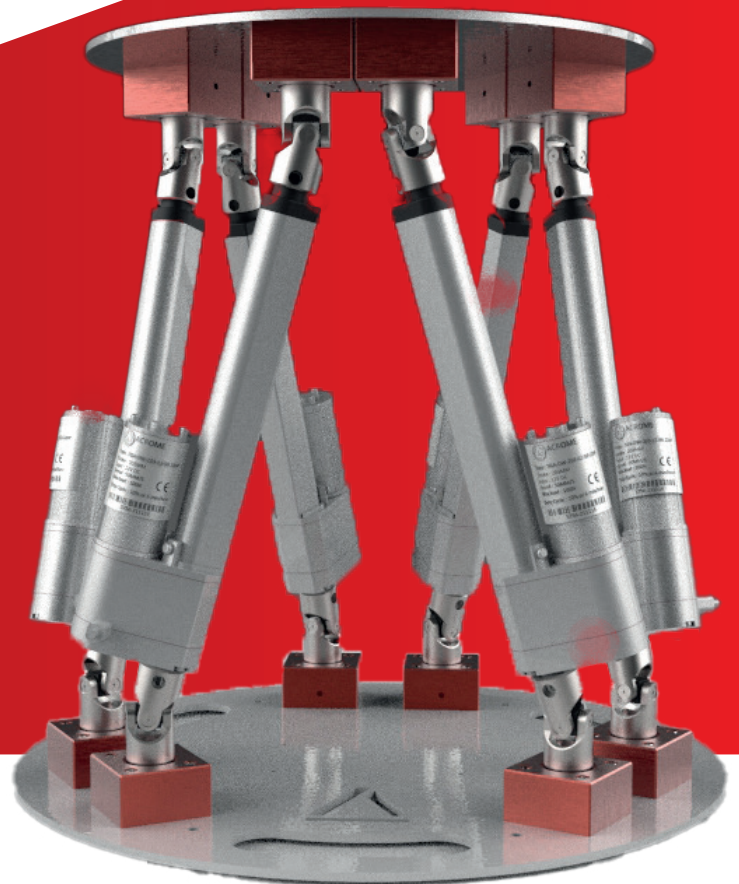# ACROME

STEWART PLATFORM

PAYLOAD CAPACITY
12 KG

LINEAR TRAVEL RANGE
10 cm

RESOLUTION
100 μM

ANGULAR TRAVEL RANGE
20°

-MATLAB
-C
-LabVIEW
-Python

READY TO USE INTERFACE

READY TO USE HARDWARE

ACROME Stewart Platform is used in precision positioning applications with its high degree of sensitivity linear actuators, gyroscope and a three-axis accelerometer. Some of the applications are listed below.

PRODUCT CONTENT

- Mechanical System with plates and built-in IMU
- Actuators and Motor Driver Board
- System Controller
- Power Supply (110 / 230 V)
- Required Cables

Professional Photography

Medical Applications
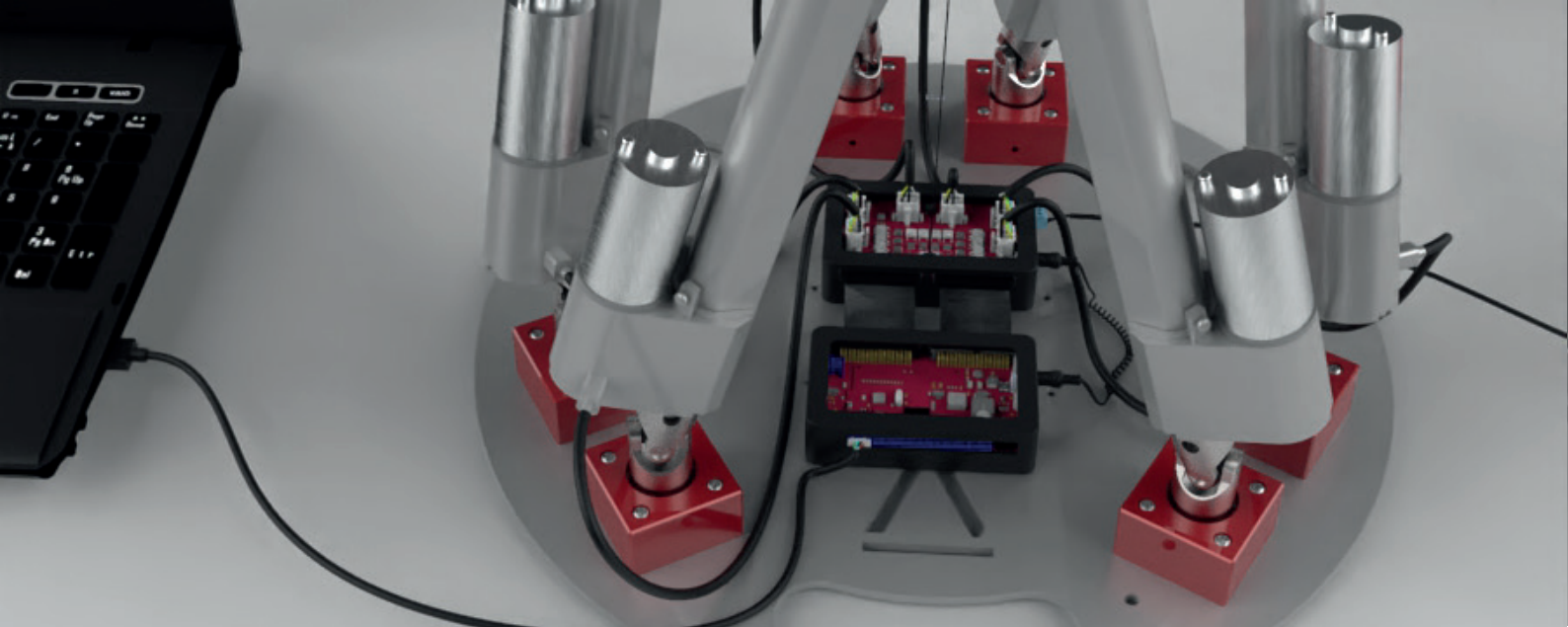
Wearable Items

Academic Teaching

Quality Assurance

Engineering Research Applications

Positioners' Algorithm Research

PROGRAMMING INTERFACES

ALTAIR   C++   LabVIEW   MATLAB SIMULINK   python

Stewart Platform can be operated with any programming language supporting TCP/UDP commands available with the API. Example codes are available for Activate, C, LabVIEW, Matlab/Simulink and Python.

A ready-to-use Graphical User Interface (GUI) application is available with simple motion commands for commissioning purposes.

DIMENSION & WORKSPACE

DIMENSIONS	4" Version	Customization Options
Base Diameter (Circular)	450 mm.	450 mm. to 1,000+ mm. options available
Platform Diameter (Circular)	320 mm.	250 mm. to 1,000+ mm. options available
Minimum Height*	406 mm.	Down to 330 mm. options available
Maximum Height*	508 mm.	Up to 920 mm. options available
Theta Base	25°	Custom geometry available
Theta Platform	90°	Custom geometry available

*: Height reference point is the top-middle of the base plate.

WORKSPACE		
Max. Travel Range X,Y	+/- 60 mm	Up to +/- 300 mm options available.
Max. Travel Range Z	+/- 50 mm	Up to +/- 150 mm options available.
Max. Travel Range Roll, Pitch and Yaw	+/- 20°	Up to +/- 45° mm options available.

GENERAL		
Power Requirement	12Vdc @ 40A	
Provided Power Supply	110/230 Vrms	
Net Weight	14 kg.	Provided based on custom requirements

MOTION SPECIFICATIONS	High Speed Option	
Max Payload	12 kg.	Options up to 150 kg. are available
Max. Linear Speed	40 mm/sec.	Options up to 80 mm/sec available
Max. Angular Speed (Roll & Pich)	12°/sec.	Options up to 30 deg/sec available
Position Repeatability	+/- 100μm	Options down to +/- 25μm available
Linear Sensitivity (Min. Step Size)	200μm	Options down to +/- 50μm available
Angular Sensitivity (Min. Step Size)	0.2°	Options down to 0.1° available
Duty Cycle (at max. payload)	%10	%10

ACROME