

MIKEHAP - TWO AXIS CONTROLLED PLATFORM

[DEVELOPED FOR ASELSAN A.Ş.]



Mikehap is a Pan&Tilt device used of orientation of systems such as laser devices, security cameras, optical test and measurement equipments, radars, target coordinate systems and vision systems. Wide range supply voltage enables the user to utilize the system by one or two car batteries in urgent situations.

FUNCTIONAL FEATURES

User Interface

System functions can be performed via a custom control device or any personal computer with Mikehap Control Interface software.

Point Target

System is capable of precise position control in pan and tilt axes.

Continuous movement

Infinite rotation is possible in pan axis.

Speed Control

Rotational speed can be controlled by the user.

Brake System

A built-in brake mechanism holds the tilt axis motor in power off situations.

Other Features

PID parameters, Rotational soft limits, Speed and acceleration settings can be tuned via Settings window in Control Interface Software.

TECHNICAL SPECS

Two Options for Pan Axis Rotation:

1. 360° continuous (with Slip Ring)
2. $\pm 180^\circ$ (without Slip Ring)

Tilt Axis Rotation:

$\pm 45^\circ$

(Up to $\pm 90^\circ$ in case of no mechanical obstacle)

Positional Resolution:

0.1 mrad (0.006°)

Positional Accuracy (static and without load):

1.4 mrad (0.08°)

Maximum Payload:

5 kg

Lowest Speed:

0.2 mrad/sn (0.01°/sn)

Highest Speed:

20°/sn

Maximum Continuous Torque:

10 Nm

Maximum Stall Torque:

12 Nm

Weight:

3.5 kg (5 kg with Slip Ring)

Supply Voltage:

12 - 32 VDC

Communication Interface:

RS422

Software Interface:

Compatible with AS003224

ENVIRONMENTAL CONDITIONS

Operating Temperature

Operation in between -32°C and $+55^\circ\text{C}$

Storage Temperature

Storage in between -40°C and $+65^\circ\text{C}$

Temperature Shock

Resistant to rapid temperature changes between -40°C and $+65^\circ\text{C}$

Moisture

Compatible with MILSTD-810G, Method 507.5 Procedure II.

Rain

Resistant to rain with 10 cm/hour drip rate and blowing wind with 18m/sn speed in any direction.

Sand and Dust

Resistant to dry blowing sand with 6-10m/sec air velocity, or blowing dust-laden atmospheres with concentration of 5-10.6 gr/m³ and temperature in between $+23^\circ\text{C}$ and $+52^\circ\text{C}$.

Altitude

System can function in altitudes up to 4572 m.

Portability

System can be shipped in its case via a motor vehicle or by using railway or airway.

Drop

System is resistant to falling from 122 cm height in its shipping case.

Protection Level

IP65

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