

DATA SHEET

PANTILT4030HWS

2 – axis Azimuth (PAN)
and Altitude (TILT) control
with absolute encoder



Pictures may differ from reality

**FEATURES**

- 2-axis movement (*Azimuth and Altitude*)
- High speed (*15 rpm Max*)
- Angle output resolution 0.01°
- Low backlash $\leq 0.07^\circ$
- Lock when power failure
- RS-485 interface
- Monolithic aluminum CNC, hard anode
- Light weight body
- Electromagnetic Brake: Save and lock positions when power down (*both Pan and Tilt*)

APPLICATIONS

PANTILT4030HWS is targeted at applications demanding high stability and accuracy with tough environmental requirements.

Typical applications include:

Antenna
alignment

Camera
Pan Tilt mount

Positioning and
guidance systems

1. INTRODUCTION

This document contains essential technical information about the PANTILT4030HWS including specifications, electrical properties and outline drawing.

2. SPECIFICATIONS

2.1 General Specifications.

Specifications for PANTILT4030HWS

Pan angle range	400° (-200°÷ 200°)
Tilt angle range	160° (-80°÷ 80°). 0° position is Home position and Tilt' Jig is horizontal
Pan max speed	60°/s - <i>may be customized</i>
Tilt max speed	50°/s - <i>may be customized</i>
Position resolution	0.01° (<i>both Pan and Tilt</i>)
Position accuracy	0.15° (<i>both Pan and Tilt</i>)
Backlash	0.07° (<i>both Pan and Tilt</i>)
Rate Moment	45 N.m (<i>both Pan and Tilt</i>)
Peak Moment	60 N.m (<i>both Pan and Tilt</i>)
Lock moment	75 N.m (<i>both Pan and Tilt when positioning completed</i>)
Load capacity	Top mount up to 30 kg
Voltage Supply	24 - 36 VDC
Power consumption	Max load 200W (<i>100W per one axis</i>)
Interface	RS-485
Software control	Als control (<i>only Windows</i>)
Protocol	Provide API control
Material	Aluminum
Size	H265 x D191 x W120 mm ($\pm 5\%$)
Weight	7 $\pm$ 0.5 kg (<i>Not include pole mount and accessory</i>)
Operating temperature	-10°C - 60°C
IP rating	IP66 (<i>IP67 option</i>)
Humidity	Up to 98%
Support	Salt fog (<i>MIL STD 810G Method 509</i>) Vibration: Vibration amplitude 1.19mm, frequency from 15Hz to 50 Hz in 30 minutes. Shock: Acceleration 20g, frequency 60 to 80 times/min, impact 18 times.

2.2 Flow chart working

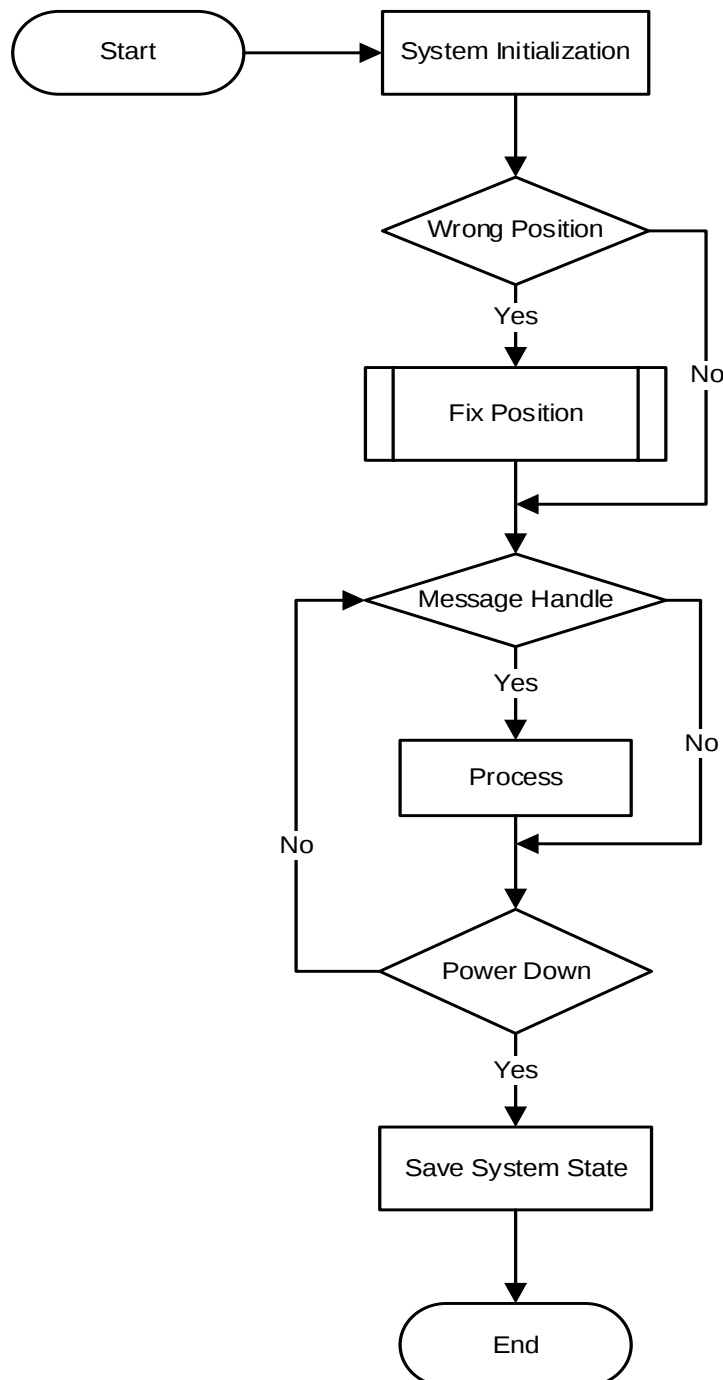


Figure 2: Process flow diagram

2.3 Product Outline Drawing

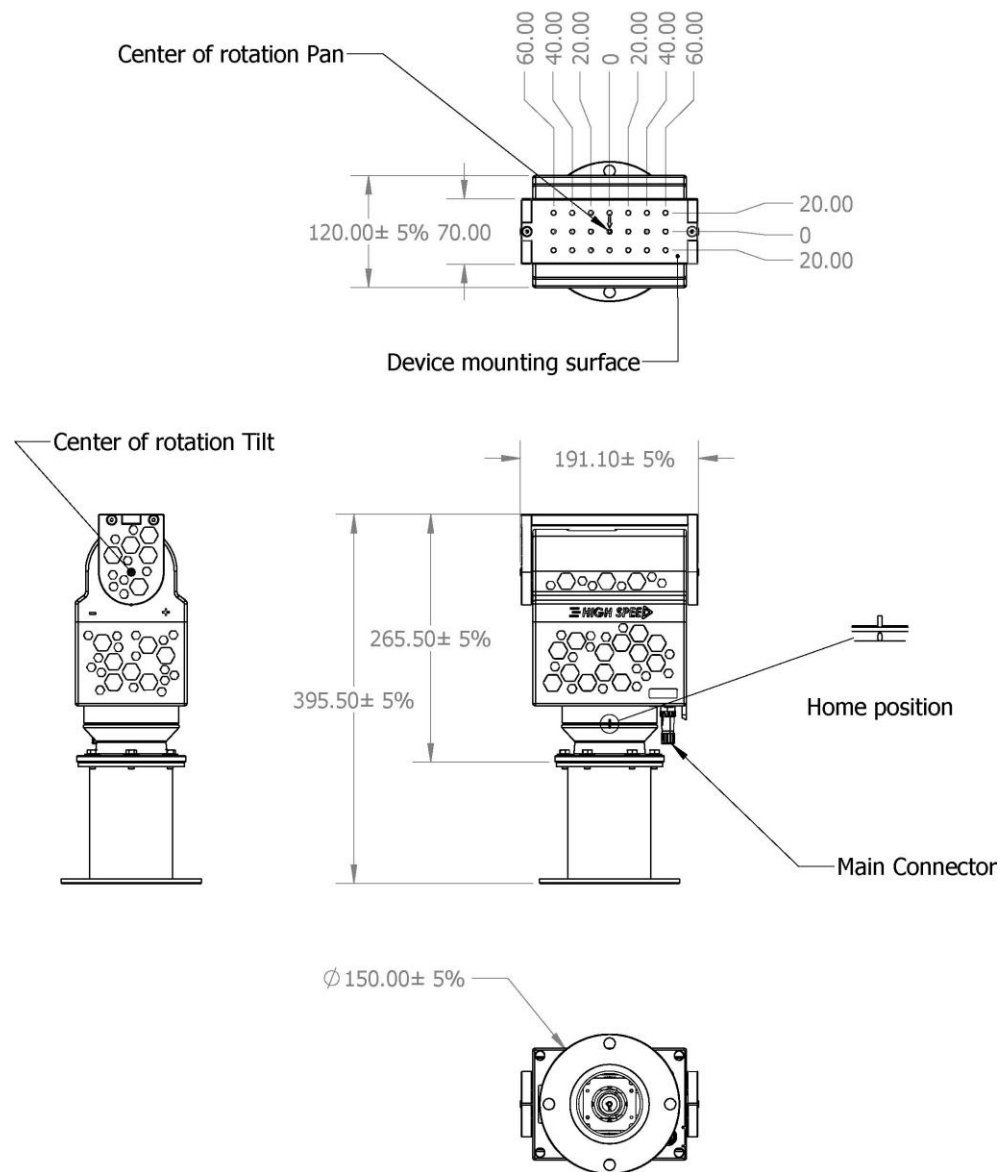


Figure 3: PANTILT4030HWS outline drawing, units: mm
(Tilt and Pan positions are 0°)

2.4 Accessory

No.	Name	Quantity
1	Cable control connect Device to other system control (ex. Auto alignment ...)	1 pcs
2	Pole mount (SUS 304)	1 pcs
3	Screws and tools	1 set
4	User guide and quick start paper	1 set

3. EDITING HISTORY

Date	Version No.	Content changes
01/05/2023	Ver 1.0	Create new datasheet

4. CONTACT US

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