

**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  $0.01^\circ$
- 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±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

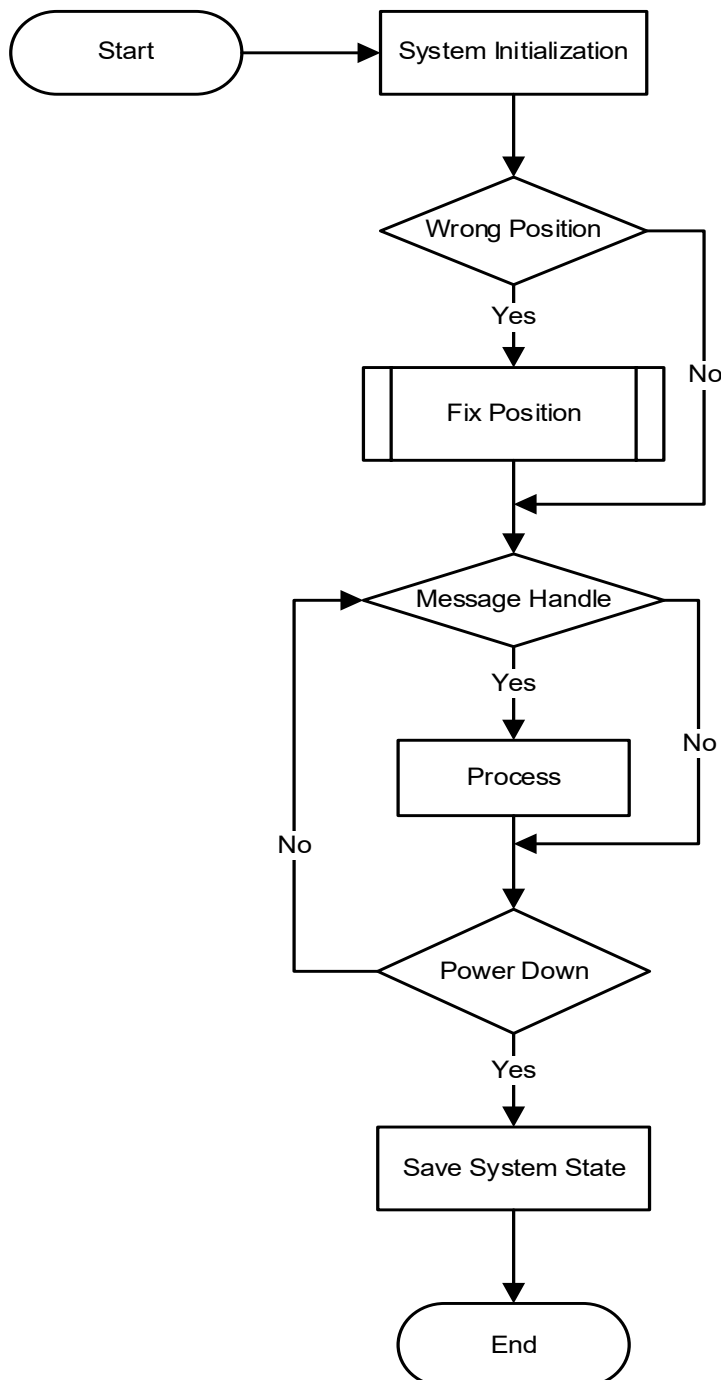


Figure 2: Process flow diagram

### 2.3 Product Outline Drawing

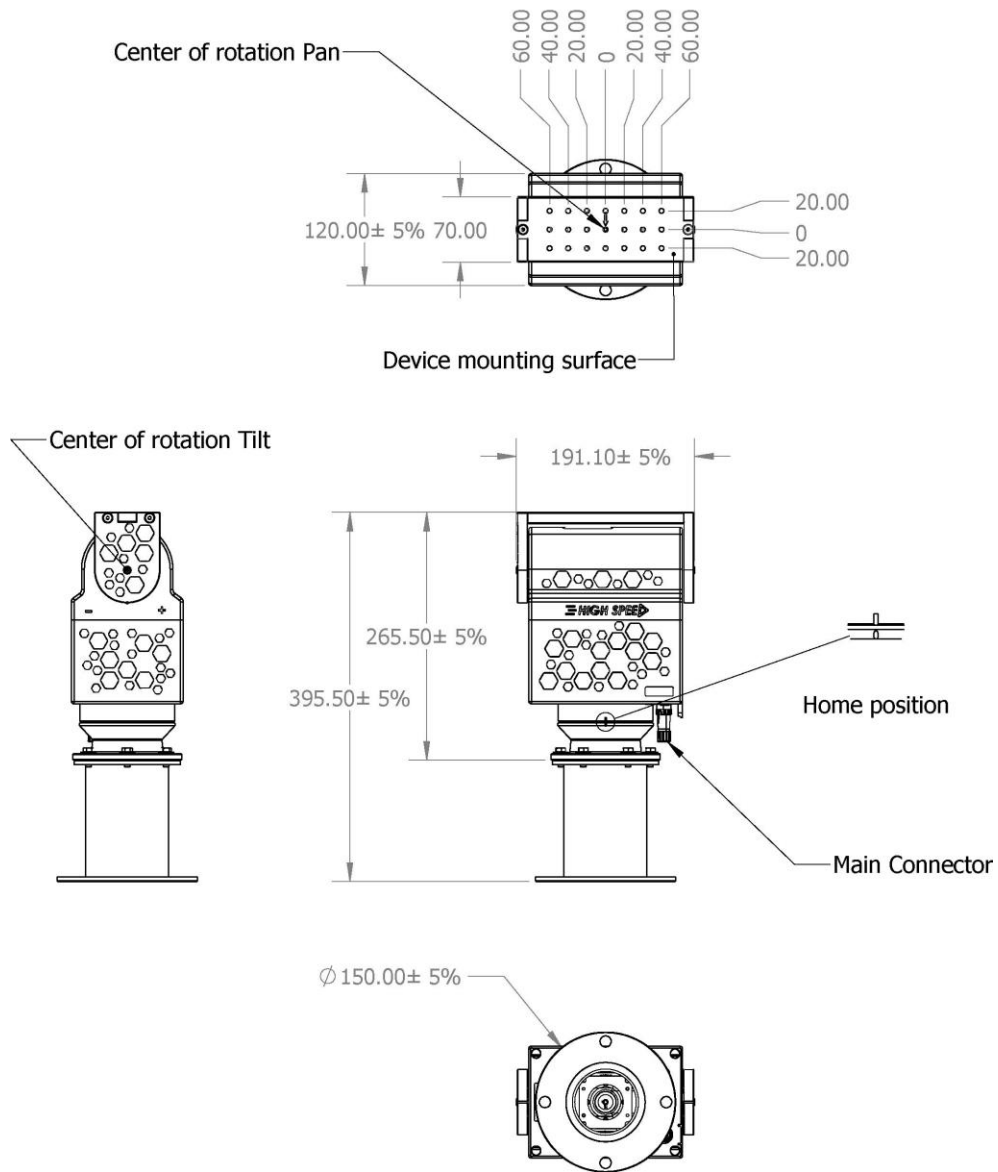


Figure 3: PANTILT4030HWS outline drawing, units: mm  
(Tilt and Pan positions are  $0^\circ$ )

## 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

### VIET ELECTRONIC TECHNOLOGY SOLUTIONS (VIETES CO., LTD)

 No. 79, Lane 193 Trung Kinh, Yen Hoa, Hanoi, Vietnam

 [www.vietes.vn](http://www.vietes.vn)

 [info@vietes.vn](mailto:info@vietes.vn)