



SS250 Pan & Tilt Device “Deep Blue”



Specifications

Dimensions:	
Height:	11.5 in. / 292 mm
Width:	9.7 in. / 246 mm
Depth:	5.1 in. / 137 mm
Weight:	22.9 pounds / 10.4 kilograms (in air) 13.5 pounds / 6.1 kilograms (in water)
Housing:	Hard anodized aluminum
Connector:	Customer Selectable
Operating Depth:	100 feet / 30.48 meters (air filled) 10,000 feet / 3,048 meters (oil filled)
Power:	24 VDC (15-30 VDC), 4 amp peak current
Torque:	65 foot pounds (88 Nm) each axis
Rotation Speed:	Up to 35 degrees per second
Gear Backlash:	36 arc minutes
Scan Range:	360 degrees both axes 180 degrees tilt axis with yoke

Design and Specifications are subject to change.

Sidus Solutions' SS250 deepwater pan and tilt assembly is a powerful robotic positioning device. Within a small footprint, you are now able to position heavy loads with ease and high accuracy.

Like the SS109, the SS250 gains its dependability and ease of maintenance through integration of reversible synchronous motors, extremely low backlash harmonic drives and precision ball bearings into an unique modular motor assembly. This workhorse offers impressive torque ratings up 50 ft-lbs securely locked into the corrosion resistant , one-piece underwater housing.

The distinctive modular design, simplifies field repair to using only small hand tools. Modifications can be made to include feedback circuits and limit switches for applications where rotational information is vital.

Drive commands are available in analog or serial RS232, RS422 and RS485. Sidus Solutions supplies complete turnkey inspection system equipment and services. Ask your representative today about other Sidus Solutions product offerings and services.

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Product Specifications: SS250 Robotic Positioning Device

Product Features

- 24VDC Operation
- Low backlash harmonic gear drive
- 360° pan rotation model available
- Harsh environment construction
- Internally compensated for 3km water depth rating
- Digital or analog availability
- Robust 65 ft. lbs. of torque*
- User selectable connectors
- Load distribution feature: keyed output shaft



The **SS250** is a robust industrial pan & tilt device capable of handling loads of 110 lbs.

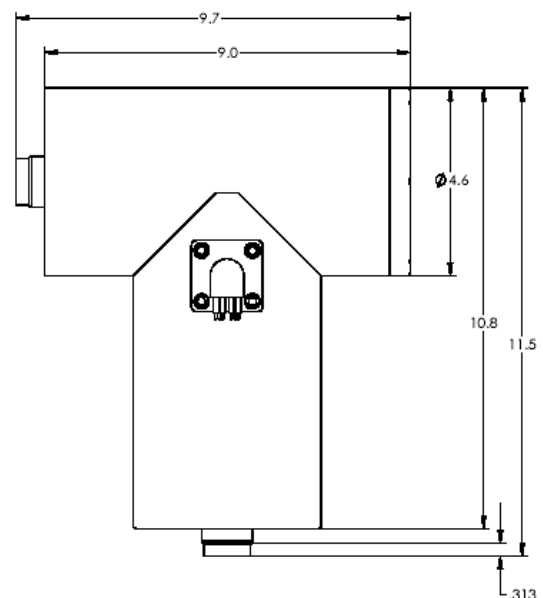
The **SS250** features reversible synchronous AC/DC motors to ensure extended functionality and is factory pre-wired for all control functions and can be fully integrated into existing or new systems.

The **SS250** can be mounted in any position on Sidus' universal mounting plate.

Harsh environmental enclosures are not required. Standard model is hard-anodized 6061T6 aluminum. Optional 316 stainless steel and titanium available

Additional options include: Digital feedback circuits and preset limiting (mechanical and software) for applications where position information is vital.

Modular design for field service accessibility





Technical Specifications: SS250 Pan & Tilt Device

MODEL

SS250 pan & tilt hard-anodized 6061 T6 aluminum

ELECTRICAL

Input Voltage: 24VDC

Pan & Tilt

Connectors: Seacon (mate supplied) or customer specified

Motors: Reversible Stepper

Optional: Preset internal mechanical or software controlled limit switch.

Conductor Requirements: 5 or 6

Digital feedback option requires 2 additional conductors

DC brake option for analog configuration requires additional conductor

MECHANICAL

Pan: 0-360°

Tilt: 0-360°

Tilt: 0-180° with yoke

Speed: Up to 35° per second

*Torque: 65 ft. lbs. (88.1 Nm)

Gear backlash: 36 arc minutes

Gearing: Harmonic drive gears

Bearings: Heavy duty bearings

Duty Cycle: 100% unlimited rating when operated below max torque.

Gear life: 15,000 hours @ 75% of rated torque

OPERATING DEPTH

Air filled: 100 feet / 30.5 meters

Oil filled: 10,000 feet/ 3,048 meters

GENERAL

Construction: 6061-T6 aluminum

Optional: 316 stainless steel or titanium

Finish: aluminum mil spec anodized, stainless steel electroplate, titanium

Environment: 10° to 120° F (-23° to 49°C)

Unit weight: 22.9lbs. / 10.4kgm (in air)

13.5lbs. / 6.1kg. (in water)

RECOMMENDED CONTROLS

SS201 Series Desktop/Flush Mount

Laptop/PC

Optional integrated functions, Pelco-D, GE, Other protocols available upon request.

RECOMMENDED MOUNTS

907 series: standard base plates for mounting in any position

CS series: custom specified mounting plates

OPTIONS

Oil compensated for 3km depth rating

Digital feedback readings

Sidus GUI

Key board, mouse or joystick control

ACCESSORIES

907 series: bracketry & mounts

902 series: lighting

904 series: cameras