

## **NANO IPT**



The *NANO Gen Series* Rotators form part of our range of integrated pan & tilt (IPT) solutions, and are designed to support our Echoscope PIPE *NANO Gen Series*® sonars and Echoscope PIPE® C500 Surface variants.

Coda Octopus 3D Integrated Pan & Tilt products are high performance units designed to meet the demanding and exacting requirements of accurate orientation and position control of the real-time 3D Echoscope PIPE *NANO Gen Series*® sonars, and the Echoscope PIPE® C500 Surface sonars. Our *NANO Gen Series* IPT units operate as an integrated solution within our 4G USE® software application which eliminates the need for multiple patch testing during mapping and inspection tasks. All angular and positional offsets are dynamically calculated within the software for simple and accurate operation. Capable of station holding the *NANO Gen Series* 3D sonar systems in hydro-dynamic environments, the units deliver 51 Nm peak-torque.

Enclosed in a rugged stainless-steel housing, the *NANO Gen Series* IPT is designed for operation in depths up to 80m, incorporating high-torque motors, low-backlash gear boxes and high-precision encoders as standard, the units meet the demanding operational requirements of marine applications.

## Accurate Orientation and Position Control



### ±90° Tilt and ±180° Pan Motion

Includes rugged interface plate to simplify mounting on pole or ROV



### Orientation Options

Deploy the sonar in portrait or landscape mode



### Automatic Rotator Tracking

Using sonar data, the Rotator will track and keep the object in view automatically



### Time-Synchronized Output

Prevent latency issues



### New, Smaller Size

The NANO IPT is roughly half the size of its predecessor, and weighs 10kg less.

## NANO IPT Technical Specifications

### Performance

|                      |                     |
|----------------------|---------------------|
| Depth Rating         | 80m                 |
| Peak Torque          | 51 Nm               |
| Operational Torque   | 31 Nm               |
| System Repeatability | ±10 arcsec (0.003°) |
| Absolute Accuracy    | ±25 arcsec (0.007°) |
| Speed Typical        | 10° per second      |
| Angular Range (Pan)  | 0-359°              |
| Angular Range (Tilt) | 0-180°              |

### Data Interfaces

|                      |  |
|----------------------|--|
| Control Interface    | Ethernet                                     |
| Time Synchronization | Via 3D Connect (NGS), Nano Gen Series 3D PSU |

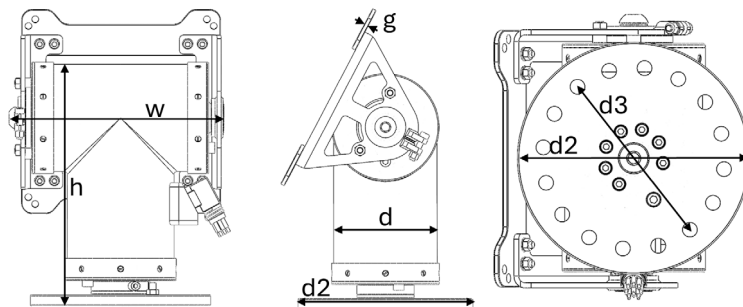
### Power

|                             |  |
|-----------------------------|--|
| Supply Voltage              | 48 V DC*                                 |
| Power Consumption (Dynamic) | Up to 2.0A at 48V DC                     |
| Power Consumption (Static)  | 200 mA (at brakehold position) at 48V DC |

\*Standard Voltage is 48 V DC. 24 V DC input available optionally

### Physical

**W** - 205mm (8.07")  
**H** - 230mm (9.05")  
**G** - 8mm (0.31")  
**D** - 102mm (4.01")  
**D2** - 172mm (6.77")  
**D3** - 134.6mm (5.29")



|               |  |
|---------------|--|
| Weight in Air | 13kg (Approx.)<br>28.66 lbs (Approx.)  |
| Connector     | Cobalt 6-Pin   |
| Construction  | Welded 'T', 316/A4 Marine Grade Stainless Steel  |
| Output Shaft  | 30mm Diameter, Nitronic 60 Steel, Splined interface with pre-installed interface plate |

Publication Date: 04.13

Version 1.1