

NANO IPT

Accurate Orientation and Positional Control

Accurate Orientation and Position Control

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 IPT* is designed for operation in depths up to 500m, incorporating high-torque motors, low-backlash gear boxes and high-precision encoders as standard, the units meet the demanding operational requirements of marine applications.



Some of the innovative *NANO IPT* features available are:



±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

While 4G USE® is locked onto a target using MATT tracking, the Rotator can automatically adjust its angles to keep the target in view



Time-Synchronized Output

The Rotator will maintain time synchronization with the sonar, ensuring that angular offsets are applied and corrected precisely



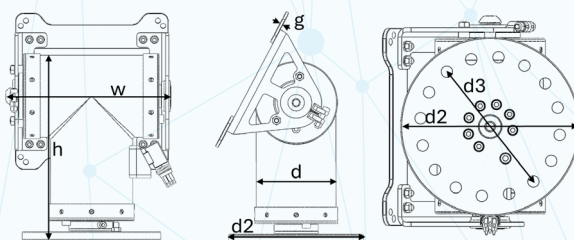
New, Smaller Size

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

Depth Rating	NANO IPT-100 100m	NANO IPT-250 250m	NANO IPT-500 500m
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)		7-355°	
Angular Range (Tilt)		4-177°	
Control Interface		Ethernet	
Time Synchronization	Via 3D Connect 5G, NANO Gen Series 3D PSU		
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

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) 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

Coda Octopus Products is a part of Coda Octopus Group Inc. a company established under the law of Delaware, USA.
Copyright©2026 -All rights and title in and/or over this document and its content are the copyright of Coda Octopus. All rights reserved.
Echoscope®, Echoscope4G®, Echoscope PIPE®, Echoscope® Ping Pong, Echoscope® 5D, Echoscope® 6D, Ping-Pong Sonar®, Ping-Pong Echoscope®, Echoscope PIPE Nano Gen Series®, 4G USE®, CodaOctopus®, F180 Series®, F280 Series® (Reg, Us Pat & TM off) are trademarks of Coda Octopus. The information in this publication was correct when it was published but specifications may change without notice. Photos are included for illustrative purposes only and actual items may differ in appearance. Coda Octopus does not assume responsibility for typographical or photographic errors.

Sales Worldwide: +44 131 553 1380 Sales Americas: +1 407 735 2400
More Information: sales@codaoctopus.com salesamericas@codaoctopus.com www.codaoctopus.com
Technical Support Worldwide: +44 131 553 7003 Technical Support Americas: +1 888 340 2632