

# stidd

# DPD3

CATALOG

# 24

## Deep Submergence Collective Propulsion

Manned & Autonomous Vehicles with Navigation, Control,  
Communications & Automation for EOD and Maritime SOF.



[stiddmil.com](http://stiddmil.com)

• DPD3 • RNAV3 • AP3 • OM3 • AC3 • POWER POD • CP3



Introducing

**NEW!**



# DPD3

**The Largest and Most Advanced  
Combat Diving Vehicle available!**

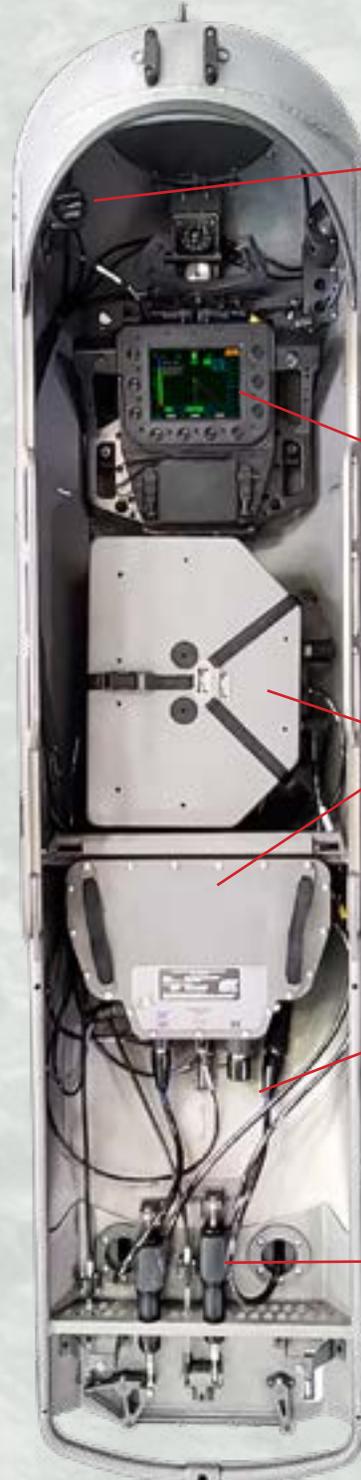
Now includes state-of-the-art Power System manufactured exclusively for STIDD by Bren-Tronics, Inc.

## DPD3 includes:

- Powerful DPD3 Propulsion Battery increases DPD range and run time
- DPD3 Universal Smart “ABC” Battery Charger accepts all Bren-Tronics, Inc. manufactured batteries to include RNAV3 Batteries
- Rapidly charges DPD3 and RNAV3 batteries.
- Integrated RNAV3 displays operational and diagnostic data directly from DPD3 Propulsion Battery
- Ruggedized JAK-LOC connectors eliminate cable/plug failures
- Advanced DPD3 AP3 Module enables innovative Diver Assist capability for DPD3
- Re-designed Battery Status Indicator provides backup battery status
- DPD3 is Deep Submergence rated to 300 FSW (91.4m)
- DPD3 is now available configured with “SUB-SAFE” materials



New DPD3 Propulsion Battery



**NEW!**

### BATTERY STATUS INDICATOR (BSI)

- OLED Screen with state-of-charge (SOC) as a percent (%) of full (0-100%)
- Ergonomic location allows operator to quickly and accurately assess in real time the amount of battery time remaining

**NEW!**

### RNAV3

- Real time battery status information display
- Range at current throttle settings displays for range option
- SUB-SAFE materials and Deep-Submergence rated

**NEW!**

### DPD3 BATTERY SYSTEM

- Increased run-time
- Digitized output to RNAV3
- Ruggedized Connectors
- Ergonomic bulkhead angle for ease of access
- Deep Submergence (DS) 300 FSW (91.4 M) rated

**NEW!**

### CONNECTORS

- Ruggedized Easy Mate / De-mate
- Simple Replacement
- Damage prone penetrator whips eliminated

**NEW!**

### AP3 DIVER ASSIST

- Dramatically reduces diver workload and increases navigation accuracy by enabling hands-free route following and depth hold to the objective at the press of a button on the RNAV3



**STIDD the BEST choice...**  
 for a generation of SOF combat divers who required the  
 Largest,  
 Most Capable, combat diving vehicle available.

*Now, leveraging over 25 years of submersible manufacturing know-how, and the legendary reliability of the DPD, STIDD is proud to announce the arrival of DPD3. Now available with Battery and Universal Charging System manufactured by Bren-Tronics, Inc.*

**DPD3 is the BIGGEST, and most TECHNOLOGICALLY ADVANCED DPD ever built.**

With industry leading BATTERY TECHNOLOGY, use of "SUB-SAFE" materials, maximum DEPTH RATING, multiple CARGO OPTIONS, and the revolutionary RECONS package. A new generation of combat divers can again choose STIDD with our LARGEST, MOST INNOVATIVE model yet, DPD3.





# DPD3 Advan

## RNAV3 Battery Display Integration

Integrated battery info displayed on RNAV3 provides enhanced mission planning and real-time operational utility.\*

- DPD3 propulsion battery STATE OF CHARGE (SOC) displayed on RNAV3 screen.
- DPD3 propulsion battery DISCHARGE RATE (Amps) displayed on RNAV3 screen.
- DPD3 propulsion battery TIME REMAINING displayed real-time as DPD throttle position changes
- Range at current throttle setting calculator displayed on RNAV3 screen enables diver to optimize range remaining.

\*requires AP3 Control Module.



RNAV3 display of DPD3 Battery (fore/ aft) operational parameters

Real-time detailed battery status enables simplified diagnosis and operation.

- Charge time to full
- Discharge time to empty
- Cell Pack Temperature
- Cell Pack Voltage
- Cell Pack Current
- Charge time to full
- State of Charge (SOC)
- Discharge Cycle Count



RNAV3 graphic display of DPD3 Battery DTE/TTE parameters.



## DPD3 Universal Battery Charger



- Less than 8 hours to full charge
- Fully automatic charging
- Fully automatic discharging to 30% SOC for UN/DOT shipping requirements
- Capable of unattended maintenance charging for long-term storage
- Parasitic discharge prevention (will not discharge battery if left connected)
- 3 LEDs • Charge • Done • Fault
- Accepts all Bren-Tronics manufactured batteries, including RNAV3 BB2590

# anced Technology

## DPD3 Propulsion Battery

- **Increased Charging Connector conductor size allows 66% faster rate of charge.**
- **Compatible with all planned and future capability expansions.**
  - Conforms to all space claims of current and future components (RNAV3, S3, AP3, OM3, Diver Comms, future Sensors)
- **New battery container ergonomic bulkhead angle improves access and ease of cable attachment/removal.**



Jak-Loc Connectors installed on DPD3 Propulsion Battery



## Jak-Lok™ Connectors

- **Ruggedized easy-mate/de-mate Jak-Lok™ connectors and cables eliminate handling damage and penetrator failure**
- Damage prone penetrator whips eliminated
- Ruggedized battery bulkhead connector pairs carefully chosen based on decades of prior experience to reduce component failure rate and down time
- Cables mate/de-mate by manually turning Jack Screw Collars, eliminating tugging, pulling, and wiggling of connectors that has caused wire breakage and contact damage
- If a cable failure occurs, it can be quickly replaced from spares inventory on-site without factory service, since it is no longer integral to the battery pressure vessel

## BSI Battery Status Indicator

- OLED Screen that provides state of charge (SOC) as a percent (%) of full.(0-100%)
- Ergonomic location allows operator to quickly and accurately assess in real time the amount of battery run time remaining.



RNAV3 Battery Status Indicator (BSI) indicating 90% SOC.



## AP3 Control Module

Contoured to fit expanding space claims of DPD3 in the environment of the DPD3 Propulsion Battery, the AP3 Control Module retains all the diver assist performance and operational features of previous diver assist module, but provides dramatically enhanced DPD3 connectivity features, including:

- X2 Ethernet ports for connecting to DPD3 propulsion battery data
- X1 Ethernet port with software switchable DC power for capability expansion, (i.e. Side scan sonar, Diver Comms, Video)



# INTRODUCING **NEW!** RECCONS

STIDD's new Advanced Precision Navigation System for DPD3



Building on the legacy of its Diver Propulsion Device (DPD), the most widely used combat vehicle of its kind, STIDD designed and developed a system of DPD Navigation, Control, Communications, and Automation features which enable a seamless transition between Manned and fully Autonomous modes, known as RECCONS.

RNAV3 was developed by STIDD partnering with Greensea IQ as the backbone of this capability. RNAV3 is powered by Greensea's patent-pending OPENSEA™ operating platform, which not only enables RNAV3's open architecture, but also seamlessly integrates STIDD's OM3/AP3 Diver Assist /S3 Sonar/ AC3 Communications products into an intuitive, easy to use, autonomous system. When fully configured with the Precision Navigation, Control & Automation System including RNAV3/OM3/AP3/S3/AC3, any DPD easily transitions between Manned, Semi-Autonomous, and Full-Autonomous modes.



# **NEW!** RECCONS

RNAV, ENABLED, CONTROL, COMMS, OPTIONALLY MANNED, NAV & SONAR PACKAGE

## RNAV3 PRECISION NAVIGATION & CONTROL

- Ensures Precise Clandestine Navigation
- Intuitive, User-Friendly Interface
- Open Architecture System
- Diver-Portable and DPD-Mounted in single form factor



### OM3



#### OPTIONALLY-MANNED

- Automates key DPD Functions
- Seamless transition from Manned to Autonomous Modes

### AP3



#### DIVER ASSIST

- Dramatically reduces diver workload and increases navigation accuracy by enabling hands-free route following and depth hold to the objective at the press of a button on the RNAV3

### S3



#### SONAR

- Enhances Precision Navigation
- Allows Obstacle Avoidance and Target Identification

### AC3



#### ACOUSTIC COMMUNICATIONS

- Provides long range communications between DPDs
- Enables texting, data sharing and tracking

# RNAV3 PRECISION NAVIGATION

## for DPD-Mounted, Diver-Portable & DPD-OM3 Missions.

RNAV3 Precision Navigation System is an innovative electronic navigation system that can be either mounted in the DPD to enable precision navigation by combat divers, or without divers for Optionally-Manned Vehicle (OM3) missions. Additionally, the RNAV3 can be dismounted in seconds for swimming in hand-held mode. In any role, the RNAV3 offers SOF personnel the unprecedented capability of a navigation tool for precise clandestine subsea navigation, mine countermeasures, beach reconnaissance, ship-attack, missions, object identification, and AUV operations.

The RNAV3 adjustable back-lit 8.4" color LCD screen constantly displays the operator's position on a high resolution moving map display for instantaneous situational awareness. Position accuracy of 0.5% over distance traveled is achieved through a suite of high-accuracy on-board sensors and an optimized Kalman filter.

The RNAV3 is powered by an internal BB-2590/U Li-Ion battery which provides system power for 7+ hours or 5+ hours when configured with the S3 Sonar Option forward imaging sonar.

The battery life enables 1500 full discharge cycles and is recharged through an external recharging port on the RNAV3.

Recharge time is <8 hours.

The simple to operate ergonomic input devices and user-friendly mission planning software allow all levels of users to create waypoints and routes and easily upload them into the RNAV3.



## RNAV3, AP3 Diver Assist, AC3 Communications and OM3 run on Greensea IQ proprietary software

RNAV3, OM3, AP3 Diver Assist and AC3 Communications are powered by Greensea IQ's proprietary Balefire software, which provides easy-to-use, highly accurate navigation and control system applications for military and commercial use. Surveillance, detection, identification, and prosecution of targets can be executed efficiently and repeatedly with the exclusive proprietary RNAV3/Greensea IQ package.

The AP3 Diver Assist provides instantaneous heading and depth control for a stable platform and pinpoint navigational accuracy. Stability and control translates to accurate, reliable mission performance, while divers in hostile environments are free to focus on the mission rather than vehicle control.



### Greensea IQ proprietary features:

- Station keeping
- Alarm management
- Target tracking
- Target-relative positioning
- Dynamic positioning
- Mission execution
- Single-screen, intuitive interface

Greensea IQ's reliability, presentation, and performance make it the choice of leading military and scientific operators of manned, unmanned, subsea, and surface vessels worldwide.

Greensea IQ partners with STIDD Systems, Inc. to provide advanced custom solutions for the DPD, RNAV3, AP3, OM3, AC3 and other diver products.

**R**  
RNAV

**E**  
ENABLED

**C**  
CONTROL

**C**  
COMMS

S T I D D D P D R E C C

# DPD3 DIVER PROPULSION

The DPD, designed for and certified by the U.S. Navy, is the most advanced mobility vehicle in the world.

### DPD Certifications:

- DPD is the only export controlled “Approved” certified diver propulsion device in the world
- NATO NSN NATO (National) Stock Number
- UN Transport Certified

\*PATENTED: U.S. Patent No. 6,615,761 \* International



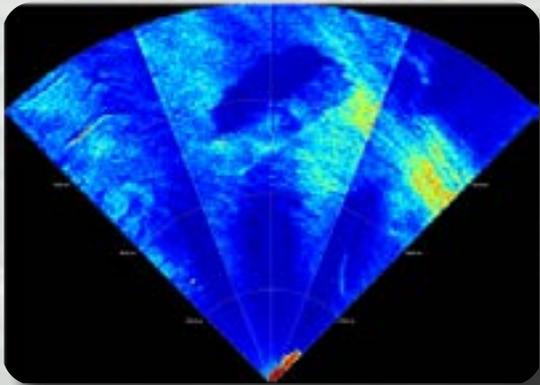
DPD in OM3 Mode

## OM3

OM3 is a transformative system of vehicle control features that enable full remote autonomous control of the DPD while maintaining manned capability.

### OM3 features include:

- Automated Antenna Mast
- Automated Throttle Control
- Communications Receiver
- Network Sensor Integration



S3 Sonar 100m range 375kHz

## S3 SONAR

The S3 Sonar Option for RNAV3 enhances the precision navigation capabilities of the innovative RNAV3, adding high quality forward-looking sonar images to the operator in low- and zero-visibility environments for precise long, or short range obstacle avoidance and/or target interrogation.

### S3 Sonar Applications include:

- Detection /Obstacle Avoidance
- Situational Awareness
- Operations Monitoring
- Area Survey/Search & Recovery
- Hydro graphic Survey



DPD3 with fore/aft cutaways exposing internal components

## RNAV3 NAVIGATION SYSTEM



RNAV3 is an innovative electronic navigation system for the DPD to enable precision navigation. It features an RNAV3 adjustable back lit 8.4" screen in portrait position on a high resolution monitor for enhanced situational awareness. Superior accuracy of the system is achieved through accuracy on-board sensors and real-time data processing. The RNAV3 is powered by an internal battery providing power for 7+ hours. The simple interface allows for mission planning software allow all levels of users to create waypoints and routes.

mission planning software allow all levels of users to create waypoints and routes. RNAV3

### RNAV3 includes the following cutting edge features:

- 600kHz Doppler Velocity Log (DVL)
- 3-axis compass with 0.1 degree accuracy
- 40 channel GPS with <2.4m position accuracy

**OPTIONALLY MANNED, NAV & SONAR PACKAGE**

**O** **N** **S**  
**OPTIONALLY MANNED** **NAVIGATION** **SONAR**

**CONSOLE LAYOUT**



AC3 Communications Screen

**IMMERSION DEVICE**

Developed by the U.S. Navy, is designed to provide underwater mobility



Approved for Navy Use™ (ANU)

World.

per

International Patents Pending

**AC3 COMMUNICATIONS**

The AC3 acoustic communications system is designed to work with the STIDD DPD and RNAV3 system to provide subsea communications and situational awareness between divers. Dive team members can easily text message each other to reduce risk and improve operational efficiency.

**AC3 features include:**

- Track team mates
- Support for homing and docking
- Exchange mission data
- Broadcast GOTO waypoints
- Configurable commands
- Macro commands



Views exposing installed RNAV3 and AP3 actuators



**NAVIGATION**



**AP3 DIVER ASSIST**



System that can be either mounted in the DPD to enable for AUV missions. The RNAV3 adjustable back lit 8.4" display for accuracy over distance traveled is achieved through a suite of Kalman filter.

Li-Ion battery which provides system power for 7+ hours. User-friendly mission planning software allow and easily upload them into the RNAV3

**Edge precision accuracy sensors:**

- Digital compass module with sub .5° heading accuracy
- Multi-state Kalman filter



The AP3 Diver Assist Option provides exceptional RNAV3 control of the DPD by dynamically adjusting vehicle pitch and heading, automatically keeping the DPD on its programmed or manually-selected course and depth, while accurately compensating for the effects of currents, diver motions, and changes in diver buoyancy.

**AP3 Diver Assist features include:**

- AP3 Diver Assist 2-axis heading control and 4th axis depth control of the DPD via integrated electro-mechanical actuators fitted to the pitch and rudder linkages of the DPD
- The AP3 Diver Assist eliminates manual heading errors, deviations, depth excursions, and delayed diver response to changing environmental conditions.
- AP3 Diver Assist software control algorithms provide a smooth and safe descent/ascent rate, protecting the divers from undesired excursions.



## STIDD DPD3

Made in USA

Maritime Special Operation Forces (SOF)  
Combat Divers underway on STIDD's  
newest model, DPD3



## DPD System 3 Mission Scenarios

Switching easily between Manned, Semi-Autonomous, and Full Autonomous modes, the DPD configured with the complete Navigation, Control and Automation System can perform an unprecedented number of missions.



# **NEW!** RNAV3 Training Simulator System



“Operator using RNAV3 Training Simulator System to mimic training dive profile”

## The RNAV3 Training Simulator System (R-TSS) consists of:

- Production RNAV3 Casing with all external ports mounted on a custom desktop interface base
- OPENSEA Simulator Hub with Software
- Hand Controller to simulate DPD inputs, and all required cables

\* TV Monitor not included



The RNAV Simulator includes a dry-land-only simulation chassis RNAV3 with functional buttons and controls, as well as a gaming quality computer with simulator software, RNAV3 software, and all the cables needed for operation.

### MINIMUM OPERATOR PROVIDED COMPUTER SYSTEM PERFORMANCE SPECIFICATIONS:

|                    |  |
|--------------------|--|
| Computer type:     | Desktop or Laptop                            |
| Video Card:        | Nvidia GeForce GTX770<br>(or better)         |
| Operating System:  | Windows 10 Professional                      |
| Processor Core:    | i7 Haswell (or better)                       |
| Min. RAM:          | 8 GB   |
| Screen Resolution: | 1280 X 720 pixels<br>(1920 X 1080 preferred) |

## Simulator for RNAV3 Prepares Operators in a Virtual Underwater Environment

### PRACTICE ON LAND - EXECUTE IN WATER

The RNAV3 Simulator provides a powerful training tool to develop and maintain proficiency with RNAV3 without utilizing actual RNAV3 hardware or requiring in-water activities. With controls that closely mimic RNAV3 and the same software as RNAV3 running on a laptop, users experience realistic navigation, sonar, mission planning, and DPD simulation.

Practicing and training on missions within the simulator replicates actual CONOPS with the mission planning software. Trainers can specify starting coordinates, environmental conditions such as time of day, surface conditions, current, and turbidity. Each scene is typically 2km x 2km and includes seeded mine targets to facilitate operators developing sonar proficiency and object detection.

### REAL WORLD BECOMES VIRTUAL REALITY

Based on a high-fidelity physics engine with an accurate hydrodynamic model of the DPD and using real world bathymetry and satellite data, simulated raw sensor data is provided to RNAV3 as operators maneuver in the virtual world. Simulation happens at the raw sensor level to fully utilize the software platform of RNAV3. Operators can accurately exercise all functions of RNAV3 including pre-dive checks, mission planning, initialization, alignment, sonar, and diver assist.

The RNAV3 Simulator provides a powerful and comprehensive means for operators to maintain proficiency, train, and evaluate operational scenarios without going into the water. The simulator uses the exact software as RNAV3 and the identical embedded processor creating a convenient means to evaluate new software releases, demonstrate the functions of RNAV3, and even practice failure scenarios. RNAV3 provides navigation, control, communications, and autonomy for the Diver Propulsion Device (DPD) sold and manufactured by STIDD and is in use by SOF programs around the world. RNAV3 runs Greensea's SOF Workspace and open architecture navigation, mission planning, and vehicle control software platform developed for SOF combat swimmers based on OPENSEA®.



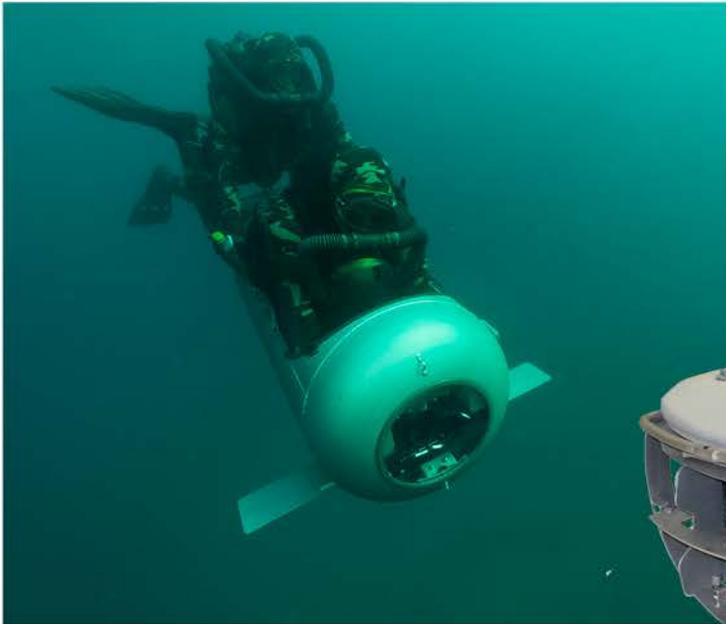
POWERED BY

**Greensea IQ**  
Intelligent Ocean Solutions

Greensea IQ provides navigation, control, and autonomy products for marine vehicles based on their patent-pending OPENSEA™ operating platform. Over 700 systems have been installed on manned, unmanned, surface, and subsea vehicles. [www.greenseasystems.com](http://www.greenseasystems.com)

# DPD3 Vehicles for All Missions . . .

STIDD now offers an expanded lineup of three different DPD3 Vehicles optimized to execute any mission profile with different combinations of **SPEED, RANGE, and PAYLOAD CAPACITY.**

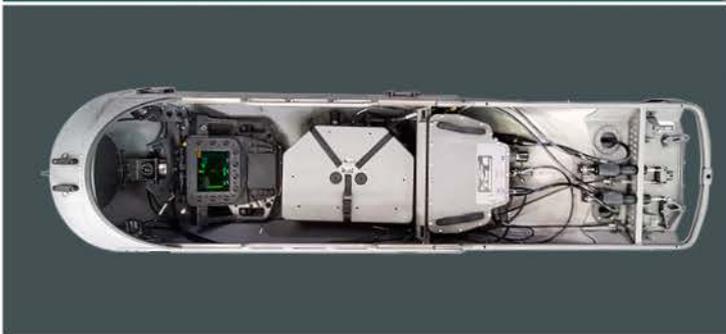


## DUAL THRUSTER (XT)

DPD3 with Dual Thruster (DPD-XT) provides operators not only additional speed and range, but also two independently redundant propulsion systems. The DPD-XT maintains all DPD exterior dimensions and certifications. The DPD-XT utilizes two (2) standard DPD batteries which power two (2) TEC3 thrusters. For missions that require extended speed and range, the Dual Thruster DPD is an ideal platform.



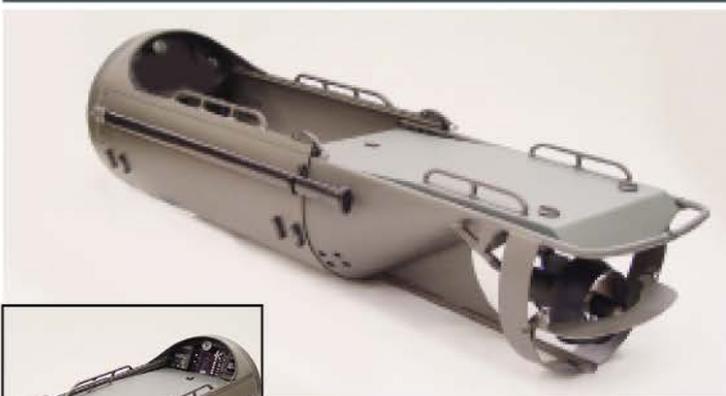
- 33% Faster than Standard DPD3
- Redundant propulsion improves mission safety
- Twin high efficiency, low noise direct drive DC thruster motors
- Additional towing capacity: Easily tows multiple divers with full load
- Two Batteries



## SINGLE THRUSTER (TEC3) EXTENDED RANGE

With the addition of a second High Capacity "MUSCLES" Lithium-Ion Battery System, the Single Thruster DPD with Extended Range Option effectively doubles the Range.

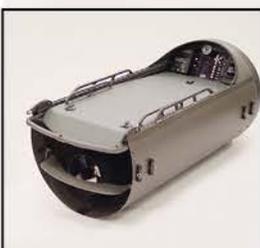
- 200% the Range of a Single Thruster DPD
- Two Batteries Required
- Same Dimensions & Certifications as Standard DPD



## SINGLE THRUSTER (TEC3)

The STIDD Diver Propulsion Device (DPD) is the most widely used military-grade underwater mobility platform in the world. The DPD enables divers to travel farther and faster with more payload than previously possible with any other diver propulsion device.

- Approved for US NAVY Use (ANU Listing)
- Under contract to USMC, US Army, USSOCOM and many International SOF Maritime Units
- NATO NSN (National Stock Number)



All DPD3 vehicles quickly convert from deployed rapid operation mode to stowed lightweight space-saving transportation mode. All DPD3 vehicles have the same proven and reliable dimensions and certifications.

\*Forward battery and RNAV3 must be removed to stow DPD.

## with all the Power Required.

All DPD Vehicles are now available with **STIDD's High-Performance TEC3 Thruster** providing Brute Power for Maritime SOF

# High Performance TEC3 THRUSTER

## TEC3 High Performance Thruster

### Brute Power for Maritime SOF

All DPD vehicles are available with STIDD's NEW high-efficiency TEC3 Thruster, which provides a 25% increase in speed over our standard MIK Thruster.

- Proprietary Magnetically Coupled Drive
- No dynamic seals to maintain
- Innovative Nozzle and Ducted Propeller
- Increased Diver Safety
- Significantly Improved Efficiency
- Self-Regulating Motor Load Electronics for improved reliability

### MAXIMUM DPD SPEEDS\*

|                                  |       |
|----------------------------------|-------|
| DPD-TEC3 (Single TEC3 Thruster)  | 3.2kt |
| DPD-XT-TEC3 (Dual TEC3 Thruster) | 3.7kt |

\*All DPD speed & range values are based upon (1) diver. Actual performance may vary with diver, training, environmental conditions and equipment.



DPD-XT (Dual TEC3 Thruster)



DPD-TEC3 (Single TEC3 Thruster)



**NEW!**

## DPD3 Propulsion Battery

State-of-the-art Battery manufactured exclusively for STIDD by Bren-Tronics, inc.

- Increased Charging Connector conductor size allows 66% faster rate of charge
- Compatible with all planned and future capability expansion
  - Conforms to all space claims of current and future components (RNAV3, S3, AP3, OM3, Diver Comms, future Sensors)
- New battery container ergonomic bulkhead angle improves access and ease of cable attachment/removal.

 Bren-Tronics<sup>®</sup>  
an EnerSys company

# Maximum Cargo Capacity

The DPD provides combat divers versatile options for carrying combat equipment including Internal, External, and Towable Cargo POD. When all options are used together, operators expand available cargo capacity to over 15 cu-ft (425L) enabling the easy transport of all required gear.

## DPD INTERNAL CARGO HOLD

(Right) Secured by a cargo net, 3 ft<sup>3</sup> (85L) of cargo can be stowed in the DPD's fore body section. Internal cargo can include diver personal gear or mission equipment. With optional Cargo Bag with Neutral Buoyancy Unit (NBU) Pouches and the optional (NBU) Packs, divers are able to make their internally carried cargo neutrally buoyant.

\* Only available with Single Thruster Model with no RNAV3 installed.



External Tie Down Cleat

## DPD EXTERIOR CARGO TIE-DOWN POINTS

Versatile cargo points, positioned port and starboard on the DPD fore body, allow operators to attach weapons, hooks, and other cargo to the DPD while underway. (Left).



**STIDD CARGO BAG** (Above) contoured fits into the DPD cargo area. Once the bag is filled with equipment it can be made neutral with the addition of the NBU Packs.



## STIDD DPD NBU

(Right) Neutral Buoyancy Unit (NBU) Pack contains 64 NBU cells. Each cell provides 1lb (500g) of buoyancy. For use with the Contoured Cargo Bag, or other load out containers.

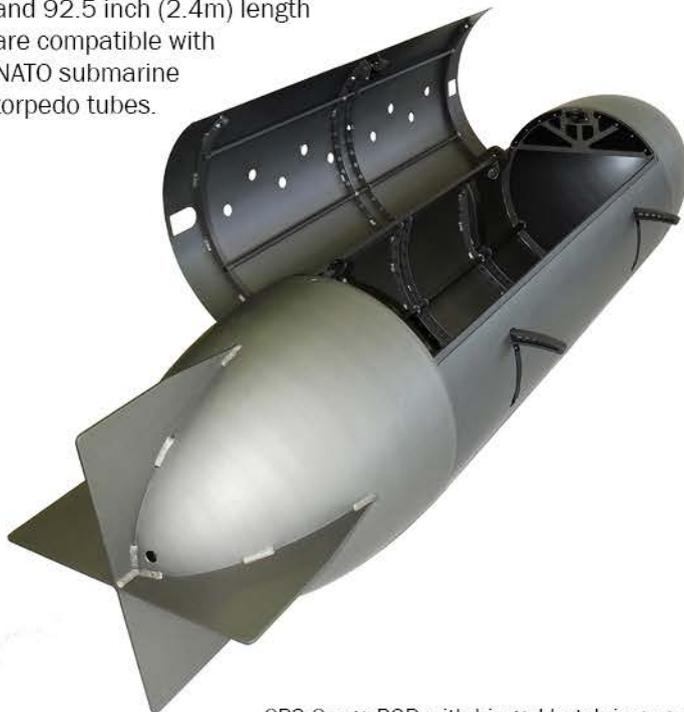


# CP3 CARGO POD

## Low-Drag Towable Capsule

The new CP3 DPD Cargo POD provides an additional 12 cubic feet (340L) of cargo space with minimal additional drag, when towed behind the Diver Propulsion Device (DPD). Optimized for minimal drag using advanced CFD (Computational Fluid Dynamics), and extensively dive-tested under real world conditions, the Cargo POD is fabricated from marine alloy aluminum and hardcoat anodized for prolonged corrosion resistance and rugged durability. Neutral buoyancy is provided by hard-mounted rigid foam volumes in the nose and tail sections.

The 21 inch (0.53m) diameter and 92.5 inch (2.4m) length are compatible with NATO submarine torpedo tubes.



CP3 Cargo POD with hinged hatch in open position

## CP3 Cargo POD features include:

- Hinged Hatch, allowing full access to the interior
- Positive spring-loaded gloved-hand operable hatch lock
- Internal tie down rails to secure gear
- Bow tow-eye for quick link to DPD
- Forward and aft lifting eyes for fast launch and recovery
- Stabilizing stern planes for positive tracking without pitch or yaw
- Multiple vents for quick fill/drain
- Four (4) Hand Holds for easy manual lift/carry



Internal tie down rails to secure gear.



Bow tow-eye for quick link to DPD

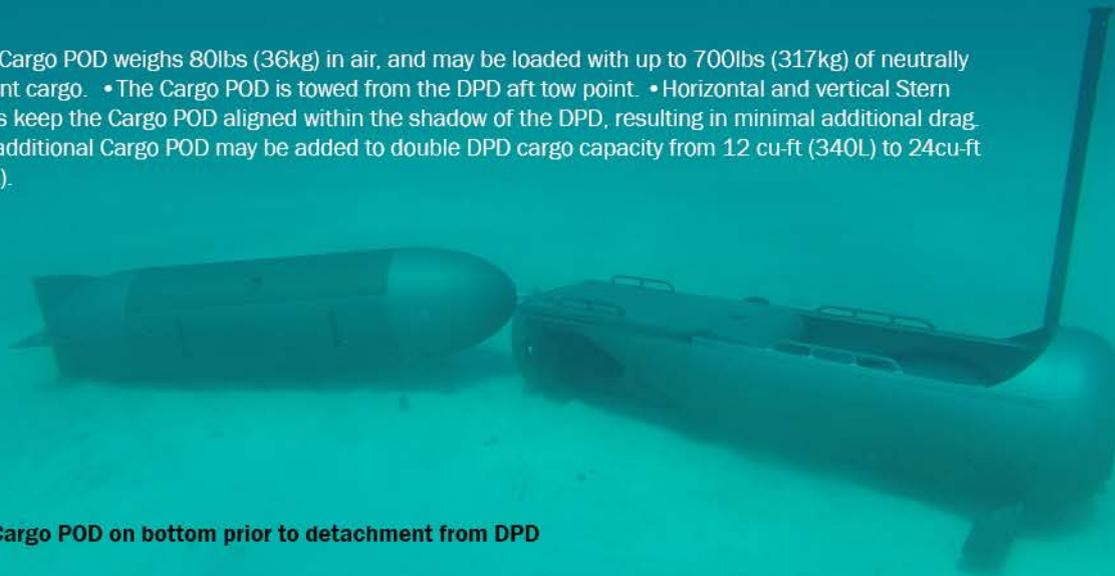


Forward and aft Lifting Eyes for fast launch and recovery

## CP3 Specifications:

|                                 |                                 |
|---------------------------------|---------------------------------|
| <b>Material:</b>                | Marine aluminum alloy           |
| <b>Finish:</b>                  | Hardcoat anodized               |
| <b>Hardware &amp; fittings:</b> | 316L Stainless steel            |
| <b>Cargo Volume:</b>            | 12 cu-ft (340L)                 |
| <b>Cargo Weight (air):</b>      | 700 lbs (317kg) max             |
| <b>Cargo Access:</b>            | Hinged hatch                    |
| <b>Cargo Hatch:</b>             | 18 in x 48 in<br>(0.5m x 1.2m)  |
| <b>Cargo length, max :</b>      | 66 in (1.7m)                    |
| <b>Cargo hatch lock:</b>        | Spring-loaded latch             |
| <b>Cargo Tie Downs:</b>         | Three (3) 48 in<br>(1.2m) rails |
| <b>Drag Load:</b>               | Minimal                         |
| <b>Diameter:</b>                | 21 in (0.53m)                   |
| <b>Length:</b>                  | 93.5 in (2.4m)                  |
| <b>Weight, empty (air):</b>     | 80lbs (36.3kg)                  |
| <b>Weight (salt water):</b>     | 0lbs (0kg)                      |
| <b>Lifting Handles:</b>         | Four (4)                        |
| <b>Lifting Points:</b>          | Forward and aft                 |

- The Cargo POD weighs 80lbs (36kg) in air, and may be loaded with up to 700lbs (317kg) of neutrally buoyant cargo.
- The Cargo POD is towed from the DPD aft tow point.
- Horizontal and vertical Stern Planes keep the Cargo POD aligned within the shadow of the DPD, resulting in minimal additional drag.
- An additional Cargo POD may be added to double DPD cargo capacity from 12 cu-ft (340L) to 24cu-ft (680L).



CP3 Cargo POD on bottom prior to detachment from DPD



# PowerPOD

## DPD TOWABLE - NAVSEA/ANU CERTIFIED - SUBMERGED AUXILIARY POWER

Building on the success of its exclusive towable Cargo POD, and in response to worldwide user demand, STIDD proudly introduces the all new PowerPOD family of submersible auxiliary power units.

PowerPOD is an innovative, one-of-a-kind maritime portable power capability, giving DPD operators a neutrally buoyant, low drag, high capacity, long duration power source for maritime surface and submerged missions.



With PowerPOD, Operators have full and easy access to 28VDC electrical power from two choices of proven NAVSEA/ANU Certified Lithium-ion batteries.

Two PowerPOD versions are available NOW in 190 and 380Ahr Long shallow water version, and COMING SOON in 170Ahr Compact Deep Submergence (DS) version, for a wide range of applications.



SP170 Compact P31 DS PowerPOD

Compact Deep Submergence (DS)  
DPD3 PowerPOD Coming Soon!



### Features & Benefits

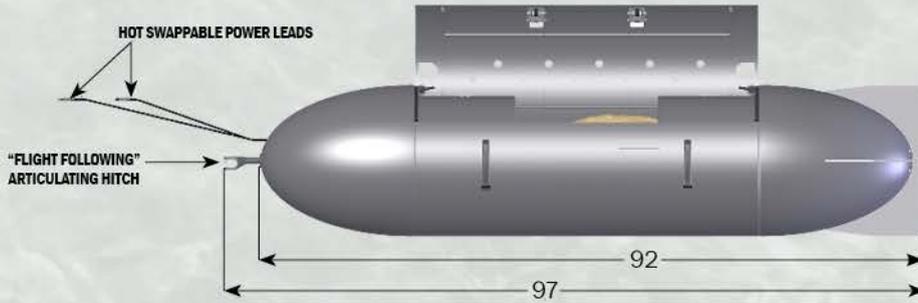
- Meets the unique needs of unattended **Sensor** operations requiring a safe and reliable long-duration DC power source
- Provides hot-swappable full-mission duration **Diver Heating** power for submerged operations
- Powers **ground support** activity
- Connects **Emergency** backup power to DPD Thrusters
- Tows with excellent stability and **low drag** behind any DPD equipped with STIDD's innovative "Flight Following" Articulating Hitch
- Easily **Cached** on the bottom
- Fits **on-board** any maritime platform
- Easily carried **ashore**
- Includes ample **cargo space** for diver gear, rucks or other payloads.



DPD towing PowerPOD in Autonomous (OM3) Mode

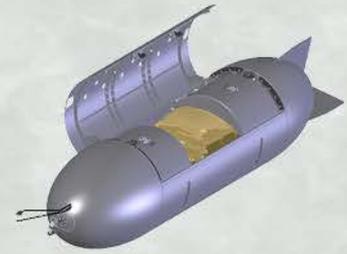
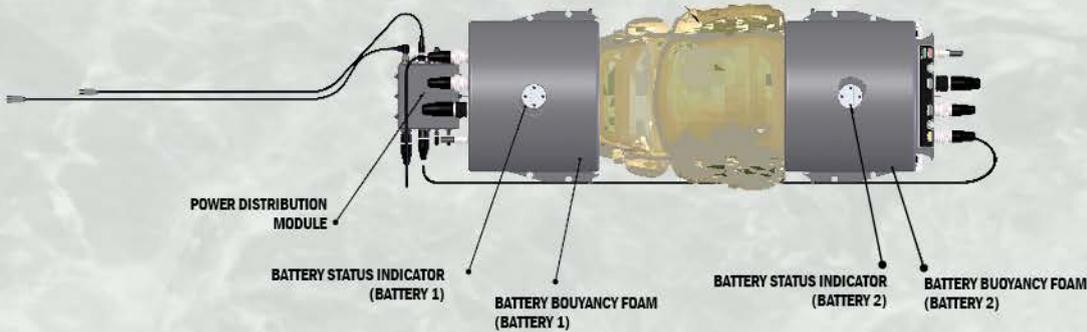
## PowerPOD General Arrangements

SIDE VIEW

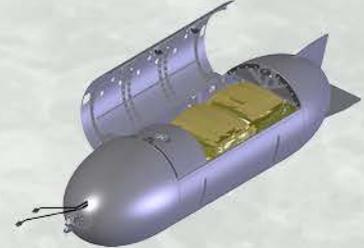


TOP VIEW

MILITARY RUCKSACK (CARGO HOLD)



**LB380 Long Dual Battery Shallow Water PowerPOD**



**LB190 Long Single Battery Shallow Water PowerPOD**



**“Flight Following” Articulating Hitch**



# PowerPOD SELECTION GUIDE

**92 in.**  
(Long Version)

**STEP 1**  
Overall Length

**59 in.**  
(Compact Version)

**115 FSW**<sup>1</sup>

**STEP 2**  
Operational Depth

**300 FSW**<sup>2</sup>

**190Ahr**  
**9.2 cu-ft\***  
SELECT MODEL  
**LB190**<sup>1</sup>

**380Ahr**  
**4.6 cu-ft\***  
SELECT MODEL  
**LB380**<sup>1</sup>

**STEP 3**  
Capacity

**170Ahr**  
**3 cu-ft\***  
SELECT MODEL  
**SP170**<sup>2</sup>

**1 - NAVSEA / ANU Certified - Now Available 2021**  
**2 - NAVSEA / ANU Certification in-process - Coming Soon**

**\*Neutrally Buoyant Cargo Capacity**

**PowerPOD WEIGHTS:**  
• LB190: 179 lbs in Air; 0 lbs in Water  
• LB380: 270 lbs in Air; 0 lbs in Water  
• SP170: 152 lbs in Air; 0 lbs in Water

## Battery Specifications:

### BT BATTERY

- Nominal Voltage: 28.8 VDC
- Nominal Capacity: 190 Ah
- Un/DOT 38.3 Rating: 5.4 Kwh
- Max Operating Depth: 115: fsw
- Weight: 88 lbs.
- Battery Status Indicator: 5 LED Gauge
- NAVSEA Certified
- Approved for Navy Use (ANU)

### DPD3 BATTERY

- Nominal Voltage: 28.8 VDC
- Nominal Capacity: 170 Ah
- Un/DOT 38.3 Rating: 4.8 Kwh
- Max Operating Depth: 300: fsw
- Weight: 79 lbs.
- Battery Status Indicator: 10 LED Gauge
- NAVSEA/ANU Certifications in process

# DPD3 and OPTIONS & ACCESSORIES

## TEC3 DPD3 Vehicle RNAV3 Ready

Includes:

- 1 ea. DPD3 Li-Ion Battery
- 1 ea. TEC3 Thruster with T-Prop and T-Struts

## XT-TEC3 DPD3 Dual Thruster Vehicle RNAV3 Ready

Includes:

- 2 ea. DPD3 Li-Ion Battery
- 2 ea. TEC3 Thruster with T-Prop and T-Struts

## RNAV3 Precision Underwater Navigation & Control System

An innovative electronic navigation system for use by combat divers, mounted in the DPD3, or dismounted in seconds for swimming in hand-held mode. Includes, internal Li-Ion battery and external charger.

## S3 Sonar (Single Frequency 375 KHz)

Enhances the precision navigation capabilities of the innovative RNAV3, adding high quality forward looking sonar images to the operator in low and zero visibility environments for precise long or short range obstacle avoidance and/or target interrogation.

## AP3 Diver Assist

Provides exceptional RNAV3 control of the DPD3 by dynamically adjusting vehicle pitch and heading, automatically keeping the DPD3 on its programmed or manually selected course and depth, while accurately compensating for the effects of current, diver motion, and changes in diver buoyancy.

## OM3 Autonomy

OM3 is a transformative system of vehicle control features that enable full remote autonomous control of the DPD3 while maintaining manned capability.

## AC3 Acoustic Communications

The AC3 acoustic communications system is designed to work with the STIDD DPD and RNAV3 system to provide subsea communications and situational awareness between divers. Dive team members can easily text message each other to reduce risk and improve operational efficiency.

## RNAV3 Tactical Mission Planning/Debrief Terminal

The mission planning terminal allows for a computerized method of planning and optimizing mission parameters for use with the RNAV3 navigation system. Post mission debriefing capabilities allows the users to review actual tracks and transit depths, recorded sonar images, marked target positions, etc.

## RNAV3 Training Simulator System

Provides a tool for operators to maintain proficiency, train, and evaluate operational scenarios in a classroom setup without having to get in the water.

## DPD3 "MUSCLES" Li-Ion Battery Charger

Charges one (1) DPD3 Li-Ion Battery from full discharge to full charge.

## Spare DPD3 Li-Ion Battery

Contained in sealed Pressure-Proof Battery Container.

## Cargo POD

The CP3 cargo POD provides an additional 12 cubic feet (340L) of cargo space with minimal additional drag when towed behind the DPD. Hardcoat anodized and neutrally buoyant, the 21 inch (0.53m) diameter and 92.5 inch (2.4m) length are compatible with NATO submarine torpedo tubes.

## Power Pod

Towable POD with on-board power.

## DPD3 Contoured Cargo Bag with NBU Pouches

Cargo bag contoured to fit into the DPD3 cargo area and be made neutral with NBUs

## Neutral Buoyancy Unit (NBU) Pack

Contains 64 NBU cells, each cell provides 1 lb (454g) of buoyancy. For use with Contoured Cargo Bag or other load out container.



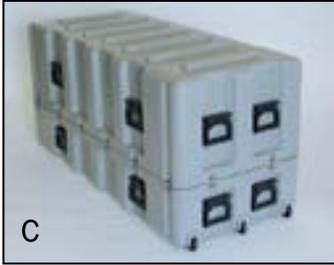
# DPD3 and OPTIONS & ACCESSORIES



A



B



C



D

## TEC3 Deployment Load Out Kit

All parts and consumables required to support the DPD3 during both operational deployment and emergency field repairs for one (1) DPD for approximately four (4) years.

## RNAV3 Heavy Duty Carry Bag (A)

Protective nylon zippered bag designed for hand-carrying the DPD3.

## Maintenance Cart (B)

Wheeled cart for servicing or storing the DPD3.

## Reusable Shipping Container (C)

Molded IATA-Approved HDPE Container with foam inserts. For one (1) DPD3. Stainless Hardware.

## DPD All Terrain Dolly (D)

Launches the DPD3 over rough terrain and over the beach to water.

## TEC3 Long Term Maintenance Spare Parts

Includes all spare parts required to perform DPD depot maintenance and non-warranty repair for one (1) DPD for approximately four (4) years.

## TEC Field Service Kit

Basic tool kit required to service and maintain the DPD3 while in operational deployment.

## Provisioning Parts List (PPL)

Listing of all recommended replaceable parts and LRUs for the DPD with current FY pricing.

## RNAV Software Support Program

Service and Support: Annual Subscription  
1 year DPD/RNAV3 (additional years of support available upon request)

- email/phone/24hr urgent phone support
- RNAV3 Software Updates
- bug fixes • access to minor feature updates
- access to major feature updates
- Greensea Knowledge Base • Personal online training

\*Customized programs are available as necessary, including extended on-site and/or offshore support.

## DPD3 Training Package

Includes: 5 days on-site DPD and RNAV3 training by STIDD certified technician

## Factory Technical Support

## ON-SITE Technical Support \*

## ON-SITE Operational Training & Support \*

\* For services rendered in CONUS. Consult factory for details.

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**For all DPD related Part Numbers (p/n), National Stock Numbers (nsn) and Pricing, please contact factory at 631-477-2400 Ext: 158, or email [sales@stidd.com](mailto:sales@stidd.com)**

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## MILITARY EXHIBIT SCHEDULE & IN-WATER DEMOS

Our military exhibit booth is an ideal place to see STIDD Sub Boats and discuss your requirements with STIDD's team of expert acquisition specialists. Please check our website for exact show dates.

STIDD also invites approved users to visit our Sub Boat Test Facility in South Florida for in-water demonstrations. On-site demonstrations at customer's facility are also possible. Contact STIDD for more details



## stiddmil.com

The STIDD Military Products website includes the latest, most up to date unclassified information on STIDD Military Submersibles

To become an authorized STIDD Military Website User Contact: 631-477-2400 ext 158 or e-mail [sales@stiddmil.com](mailto:sales@stiddmil.com)

- STIDD Systems is a Small Business Entity.
- STIDD Submersible Boats are subject to export controls. US Department of Commerce license required for export.

With nearly 1,000 units in operation by US and International Special Operations Forces (SOF), the STIDD DPD is the most widely used Combat Diver Propulsion Vehicle (DPV) in the world.

STIDD Systems, Inc. is proud to support these Military Units and International Organizations, including:

- U.S. Special Operations Command • United States Marine Corps
- Navy Special Warfare Command • Army Special Forces Command
- North Atlantic Treaty Organization (NATO) Members and Major Non-NATO Allies (MNNA) • Association of South East Asian Nation Members (ASEAN)

**[www.stiddmil.com](http://www.stiddmil.com)**



MADE IN U.S.A.



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