

High Performance . . . Under Pressure

HIGH PERFORMANCE NEWS

In This Issue

NEW BIRNS SNOOPER III "BEASTLY DRONE" WITH BEAUTIFUL CONNECTIVITY BIRNS WINS YOUTH OPPORTUNITY AWARD



A Brilliant Triple Threat with the New BIRNS Snooper™ III



The BIRNS Snooper™ has been relied on to blaze a trail at depths of up to 3km since its inception many decades ago. Now the new version of this highly customizable industry favorite provides up to 33,000 lumens and 3250K illumination, with a choice of 400 to 1,200W lamps and four different lens options--so it's perfect for a vast range of marine and deep sea applications.

With its robust, bulletproof lens_and

"Beastly Drone" With Beautiful Connectivity



Wired Magazine dubbed the Columbia Group's Proteus, a massive 7.6m/25ft, 3719.2kg/8200lb Dual Mode Undersea Vehicle capable of operation in either manned or autonomous modes, a "beastly drone", and that's right on target. BIRNS was thrilled to be called on to provide highly complex connector systems as the conduit for everything from its propulsion and camera systems to the sensor package.

The extremely versatile system can serve as an unmanned underwater vehicle (UUV) capable of carrying 1632.8kg/ 3600lbs (in air weight) of mines and/or other vehicles, and a manned wet submersible with a variable ballast capacity of 249.5kg/550lbs and room for a crew of up to six combat divers with ten hours of onboard air. Proteus can carry payload in three internal compartments with a total volume of 15.8m3/170ft³, and can go on missions out to 532 nautical miles/985km (unmanned), or for 266 hours (unmanned) on its baseline battery, before recharging is needed.



Among the 96 connectors we developed for the project was a series of 11 sets of unique 77-pin high-density metal shell connectors—BIRNS Millennium 3R-77-CPs (3R size-77-

socket-cable plug) with mating 3R-77-FRs (3R size-77-pinflange receptacles). These powerful connectors had custom-made inserts that were a mere Ø31mm/ Ø1.2 inches, thus, a colossal number of pins had to fit in a

reinforced, tempered cast body with mechanical impact protection and four sealing operations, it can be hand held or yoke mounted to practically any surface or vehicle for reliable intense underwater brilliance. The BIRNS Snooper line (NSN 6230-01-025-5628) is used by divers, on diving bells, submarines and ROVs across the world, thanks to its extremely rugged fixture, proven to stand up to heavy mechanical abuse.

The BIRNS Snooper III is available with a new backwards compatible conversion kit, with an innovative new lamp, reflector, base and lamp base mount, providing seamless adaption for any legacy system. And there are tens of thousands of existing BIRNS Snooper systems in the field-many of them on vehicles and used by divers, and still working perfectly since the 1960s.

The system features a highly polished internal parabolic reflector, with high-output Tungsten-Halogen lamp in its focal point, and comes with a choice of white light lamp, lens, and mount, with an available handgrip that is now detachable--plus, the **BIRNS Snooper III can** mount on its mounting boss for maximum space savings and versatility. It features an instant ON/OFF and hot-restrike capability, with no ballast necessary.



minute footprint. The BIRNS Millennium 3R-77 connectors were engineered specifically for the vehicle's electronic keel subsystem, as the Columbia Group needed an incredibly robust connector design capable of running multiple systems at once.

Our engineering department also designed five sets of highly specialized BIRNS Primum MSSL-3-4-CP (L sizewith [3] 4 AWG socket-cable plug) and MSSL-3 -4-FR (L size- with [3] 4 AWG pin-flange receptacle) connectors to be used for Proteus' propulsion power. These robust connector pairs featured three large pins capable of handling the system's demands for power, and could withstand heavy mechanical impact without damage.

As Proteus is the next generation of versatile, robust underwater vehicles, with the agility to seamlessly switch from fully autonomous use to manned applications, it required the ultimate in high-performance, highly adaptable connector systems to enable it to execute its myriad of important functions—as smoothly and efficiently as it cuts through the water.

BIRNS Intern Program Wins Workforce

Our company recently received a Youth Opportunity Award for providing internships and employment opportunities that help grow and strengthen Ventura County's future workforce. BIRNS has provided hands-on marketing internships for local college students since 2009, and our interns participate in meetings with department leaders and work with the company's marketing team on social media outreach, newsletter content and sales and marketing materials.

"We created this internship program to provide hands-on training and education, so that each intern would leave with a portfolio of completed work," says Birns. "I think most successful professionals, myself included, can remember clearly the commitment and effort of those people who took the time to provide coaching and education in our own early career paths, and the impact that had on us."

The company accepts two interns each year for at least a three-month commitment. "We have been fortunate to have chosen excellent interns who not only worked diligently while they were with us, but have gone on to successful careers," says Birns. "I think it's our responsibility as business owners to invest in the futures of these local, driven young people, and provide the most advanced training possible during their tenure with us. Bottom line: internships help create excellent candidates—whether in our company or for an opportunity elsewhere."



President and CEO Eric Birns (Third from right) accepts the Youth Opportunity Award.



1720 Fiske Place Oxnard, CA 93033-1863 Phone: 805.487.5393 | Fax: 805.407.0427 | Toll-Free 1.888.BIRNS.88 service@birns.com | www.birns.com

> ISO 9001:2008 Certified by DNV NRC 10CFR50, App. B Compliant NAVSEA PRO-020 Certified

