

- **We can offer a wide range of components for underwater operations**

Here at Penlink we have widespread experience in products within the marine and offshore industry. Together with our partners, we can help our customers streamline existing solutions and assist them with the design, planning and new installation of complex overall solutions.

We focus on deliver quality in everything we do – from the communication, customer service to our create process. It's important for us to be dedicated, innovative and to value customer satisfaction and let's not forget, being open for improvements. This way we can always develop and become better in what we do.

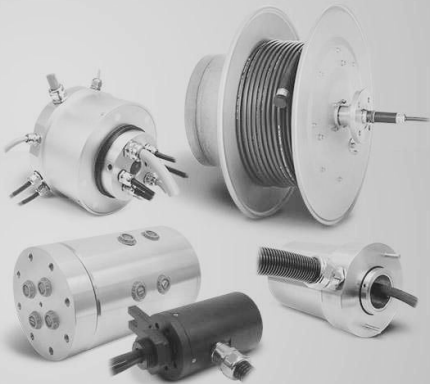
PENLINK



Your customized products without restrictions!

WORKING TOGETHER TO MAKE GREAT DESIGN

Our team at Penlink uses the most advanced tools to create, debug, maintain and support our customers in the most transparent, agile and effective way.



Transparent Documentation
& Version Control



Agile Project Management
& Issue Tracking



World Standard Electronics
Design Software

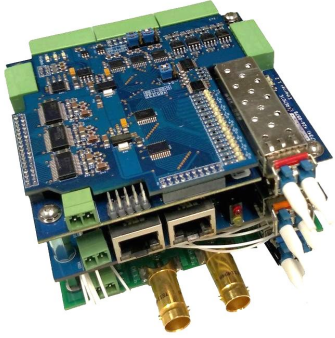


Online and Offline
First-Class Support



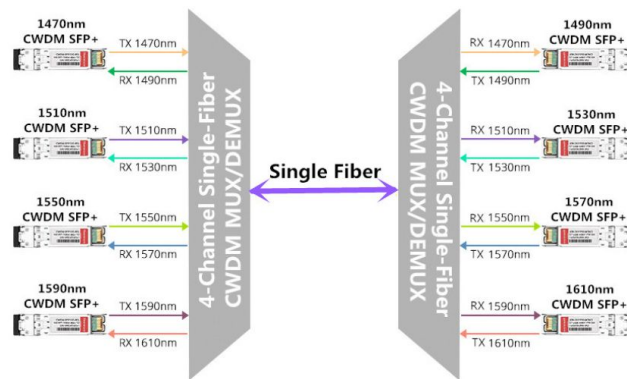
P | UNDERWATER OPERATIONS

Optical media cards



MEDIA CARDS AND OPTICAL CONTROL

Penlink offer a full range of media card for the control of the submerged ROV. We have a range of standardized media cards that fulfills most common usage, and by using a CWDM multiple cards can be stacked. We can also help ou top design and manufacture a media card with your specifications



PC104 STANDARD MEDIA CARD

Our standard PC104 Media card, has a combination of Video, Ethernet and serial communication. This reliable card has been tested in extreme environmental and vibration.

- Video: 2xHD-SDI + 1x8bit Analog camera
- Ethernet: 1x100 mb with internal 2 port switch
- Serial: 2xRS485, 4xRS232, 2xEither RS232 or RS485
- Trigger: 2 x high speed TTL Trigger functions (USBL responder trigger, multibeam PPS pulse, etc)
- LED: Power, Fiber lock, 2 x Ethernet, RX/TX (8 serial) Video signal indicators.
- Fiber: Single mode SFP, bidi and CWDM available.



P | UNDERWATER OPERATIONS

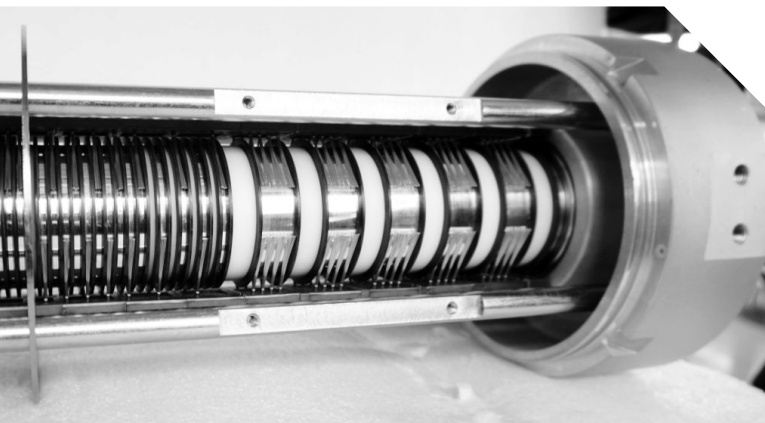
Full-sized Offshore Slip Ring



TOP SIDE SLIP RING

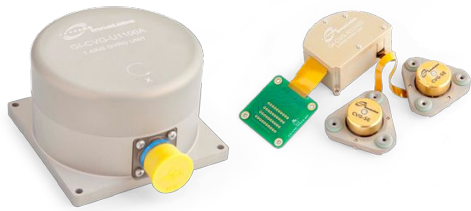
Our Rotary Joint can be customized to transfer all your needs of electric and optical power, for controlling the ROV.

These slip ring are equipped with Internal heater to reduce condensation and air purging. 1-12 Optical channels are mostly included. Mechanical flanges and hose fittings/glands can be custom made according to your requirements.



P | UNDERWATER OPERATIONS

Inertia Sensors and Encoders



TACTICAL GRADE GYROSCOPES

Our gyros is built with Coriolis technology to deliver true tactical grade performance in a small, lightweight package. With an improved Angular Random Walk, excellent short-term bias stability and North finders capacity, our gyros are perfect fit for underwater operations. The Gyros is available in both analog or digital versions, and can be delivered unboxed or within a housing.

NAVIGATION GRADE ACCELEROMETERS

The accelerometers is built with Quartz Flexure technology to deliver accurate navigational grade performance. With enhanced bias stability, improved scale factor and greater axis misalignment, the accelerometers is a perfect fit for Maritime Automated Vehicles and other demanding Applications.



ENCODERS

Our electrical encoders are designed with a larger hollow shaft and a building height of only 10 mm, makes them ideal to be installed inside subsea motors and tools. The card are also suitable for submerged in oil. Our encoders can also be used for Torque measure of a shaft. Normally accuracy are $<0.015^\circ$ and a resolution of 17-20 bits.

PENLINK | UNDERWATER OPERATIONS

Cameras and Servo Components

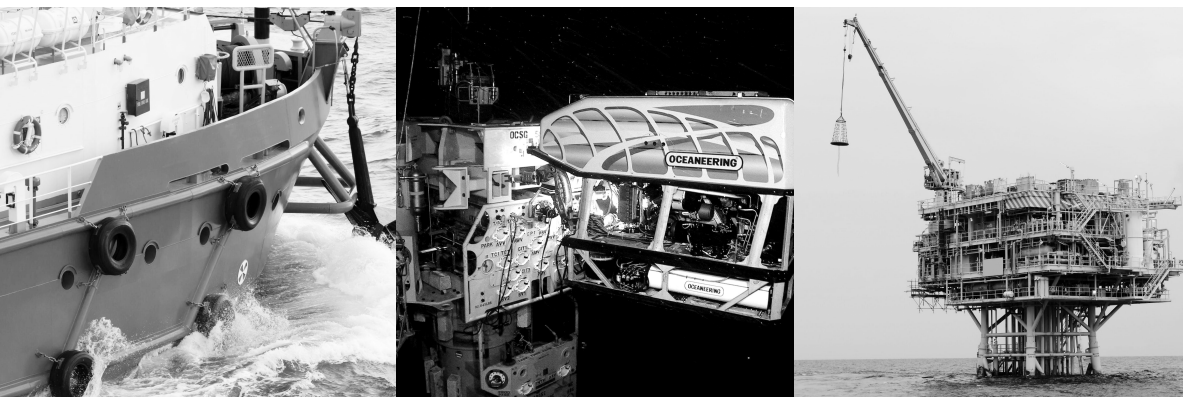
CMOS NOCTURNE AND HAWK 216

EMCCDs employ a unique architecture that enables the device to greatly amplify (>1000 times) the number of resulting electrons produced by the incident light. This feature gives the EMCCD a far superior advantage over existing CCD technology in low light conditions. NOCTURN camera is a rugged low-light camera module that features high-definition resolution, high sensitivity and high dynamic range with low power consumption. It has large pixels in order to harvest as much light as possible.



MOTOR KITS AND COMPLETE ACTUATORS

Extensive range of electric motors from a few Watts to more than 200 kW. These motors are intended to fit on-board demanding environments. They are available as a LRU (housed) or frameless that can be integrated by the customer. We can also supply complete actuators.



Let's talk business!

Get in touch with
us at Penlink!
No question is too
small or too big.



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HEADQUARTERS

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Solid Project
Management



Engineering &
Product Design



Commercial
Off The Shelf Products



Simulation &
Design Verification



Customized Design &
Integrated Solutions



Assembly
& Testing



Cutting-edge
Technology



Value-added Products
& Services