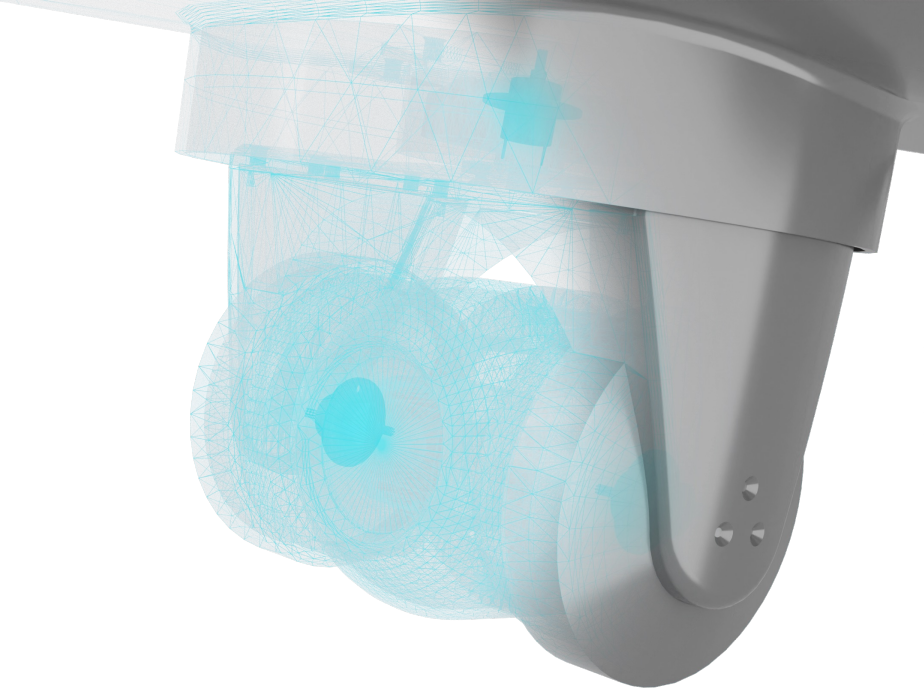


PENLINK

Slip Rings in Unmanned Aerial Systems (UAVs)

Unmanned Aerial Systems (UAVs) play a crucial role in various industries like agriculture, military, surveillance, mapping, and entertainment. These applications often demand flawless signal and data transmission as drones execute intricate maneuvers and collect vital information.

Penlink offers high-quality slip rings specifically designed for UAVs, ensuring uninterrupted and reliable data transmission even during 360° rotations. In this application note, we will focus on Penlink's smaller series of slip rings, emphasizing their benefits and suitability for UAV applications."



Penlink Slip Rings: Features and Benefits

Continuous Signal and Data Transmission

Penlink's slip rings are meticulously engineered to ensure uninterrupted signal and data transmission even during 360° rotations. This feature is of paramount importance for UAVs, as it enables the real-time transmission of critical information, including video feeds, telemetry data, and control signals during operation. Our smaller series of slip rings is specifically designed to guarantee the consistency and reliability of these vital data streams throughout the entirety of a UAV's operation.

Data Circuits: Our slip rings can handle up to 1GB of data (1000Base-X) and can be equipped with different cables to support all known industry-standard data formats, such as Profinet, Can-bus, Profibus, DMX, 100Base-X, or similar types. It's even possible to transfer multiple independent data channels through a single slip ring.

Video Signals: Our slip rings can handle both standard and high-definition videos, supporting up to SMPTE 424M/2.97 Gb/s with 3G HD-SDI.

Power Circuits: For the compact PSC Series, 2A rings are the default, but they can be combined up to 16A, depending on your specific needs and the slip ring configurations. Please don't hesitate to contact us for assistance in specifying your slip ring requirements!

Low Noise and Long Life

Our slip rings are designed with minimal noise levels, guaranteeing that signal quality remains uncompromised. Moreover, these slip rings have a long operational life (up to 1 million revolutions), reducing the need for frequent maintenance and replacements, which is especially advantageous in remote or hard-to-reach locations where UAVs often operate.

Low Torque and Smooth Rotation

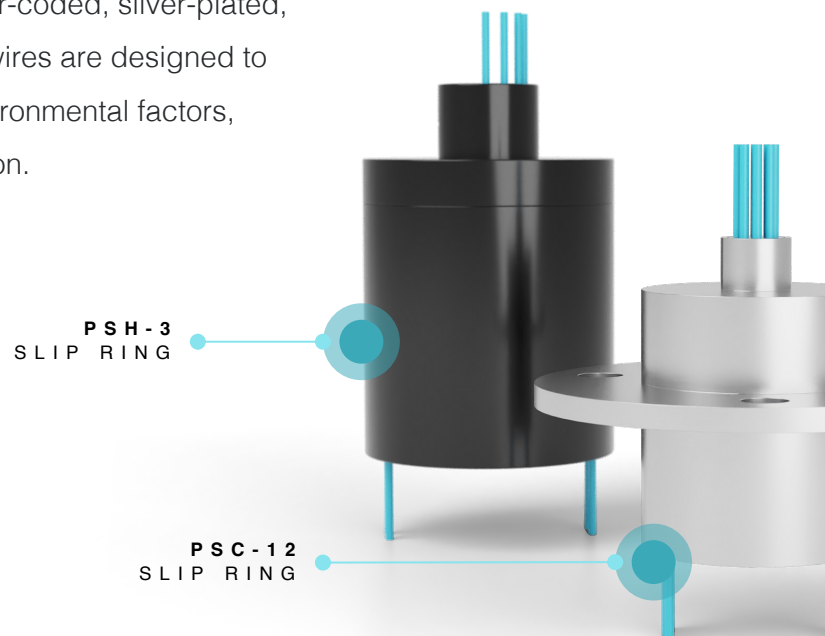
The slip rings offer low torque and smooth rotation, ensuring that UAVs can make precise and controlled movements. This is essential for applications such as aerial photography, where smooth, jitter-free camera movements are paramount to capture high-quality images and videos.

IP65 Protection Grade

The slip rings can be configured with an IP65 protection grade, making them resistant to dust and water ingress. This level of protection is essential for UAVs operating in challenging environments, including adverse weather conditions.

Flexible and Reliable Lead Wires

Our slip rings come with flexible, color-coded, silver-plated, Teflon® insulated lead wires. These wires are designed to withstand mechanical stress and environmental factors, ensuring consistent signal transmission.





Get in touch with us today to start
your next project!

WWW.PENLINK.SE

Unleash UAV Potential with Penlink's Slip Rings Precision, Reliability, and Connectivity

In the fast-paced world of Unmanned Aerial Systems (UAVs), where precision and reliability are crucial, Penlink's slip rings are the top choice. These carefully designed slip rings provide uninterrupted signal and data transmission, reduce noise, and last a long time, all while being compact. We are committed to meeting the high standards of UAV applications to ensure your important missions go smoothly.

To begin your journey towards seamless UAV connectivity, tailored to your specific needs, or to explore customization options, please reach out to our dedicated team at info@penlink.se. Enhance your UAV's performance with Penlink's slip rings, the trusted choice for reliability.

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