

Advanced Connectivity for Unmanned Aerial Systems

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HUBER+SUHNER provides state-of-the-art connectivity solutions for Unmanned Aerial Systems, ensuring reliable radio frequency, fiber optic and electrical connections.

RF and MW cable assemblies



Flight-ready MW cable assemblies combining ground-breaking coaxial cable manufacturing technology with the industry's largest portfolio of MIL-rated connectors. Our proprietary cable solutions enable premier attenuation, phase stability vs. flexure and temperature range.

RF and MW connectors



Full-circle set of interfaces to enable compact, reliable and easy connectivity: Self-lock TNCs; including low loss TNCs; field mountable Eacon connectors; ultra-small footprint board-to-board connectors; and the VITA67 suite.

MW components



Basic building blocks for MW network design including surge arrestors, diplexers, combiners and tappers. Designed and made for harsh conditions and superior electrical performance.

Multiport solutions



Rugged MIL-qualified multiport cable assembly harness solutions incorporate unique cable technology to offer the ideal marriage of durability, flex life, phase stability, and loss performance. Hybrid RF/FO/LF harnesses are also available for streamlining connectivity paths.

FO cable assemblies



Multi-mode, single-mode and mixed fiber optic harnessing for fast and sturdy optical links on-board. Bringing together our extensive fiber optic manufacturing and testing capabilities, with the broadest selection of interfaces.

FO connectors



From standard connectors such as LC, SC, ST, FSMA, E2000 through proprietary ruggedized push-pull multiport connectors, we extend to all common aerospace-grade connector shells, e.g., M38999, EN4165, M28876 and corresponding termini, e.g., 28504, LuxBeam, MT and Elio.

We collaborate with industry leaders to develop and deliver highly engineered solutions that raise system density and bandwidth without compromising signal integrity.

FO components



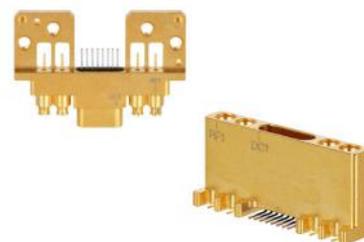
Small form-factor wavelength division multiplexers, optical MEMS switches, optical splitters, and transceivers serving as base components for on-board optical networking. We can help you design the optimal layouts with our photonics engineers.

LF power distribution



COTS-based power distribution units with defined form factors and customizable fuses and circuitry. Simple push-on connections are ideal for fast assembly and disconnection. Designed to work in unison with our RADOX power cabling portfolio.

RF/DC hybrid connectivity



Hybrid RF/DC blind-mateable push-on interfaces incorporating multiple SMP3 style RF connectors and Nano-D mating system into a common aerospace-grade link. Customizable to various pin and RF channel counts.

LF cable assemblies



Complex harnesses covering all mil/aerospace grade interfaces and cabling. From fully-sealed wiring harnesses and open-wire looms through to electro-mechanical assemblies, power cables, and battery leads.

RF over fiber



RF-FO conversion modules supporting wideband applications up to 40 GHz greatly improve analog signal range and security while reducing system form factor and frequency dependence of hardware.

Antennas



Special ruggedized, small and lightweight antennas including metallized plastics phased-arrays, GPS, jamming and MIMO for ground and flight.

Design, Engineering & Manufacturing Expertise

Your end-to-end connectivity solutions partner

- **Fit-for-purpose connectivity design & simulation**
Component-to-subsystem engineering tailored to your application needs, with quick-turn in-house prototyping
- **Vertically-integrated, cutting-edge manufacturing**
Renowned materials & processing technology focused on survivability and performance in severe environments
- **World class assembly & quality assurance**
IPC/WHMA-A-620(-S) Class 3 and J-STD-001G(S) Class 3 certified workmanship, AS9100D and ISO9001 certified QMS
- **System-level turnkey solutions**
Active and passive DC, RF/MW, Fiber Optic, and hybrid end-to-end solutions, incorporating H+S industry-moving connectivity technology for maximizing reliability while minimizing system form factor
- **Local-for-local manufacturing**
We fabricate our Aerospace products in both European and North American plants.

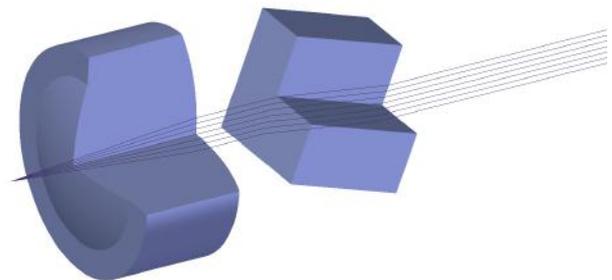
Custom products

Examples include Aviation-grade fiber optic distribution modules, hybrid electronics enclosures, GPS-over-fiber, jamming systems.



Design, Testing Simulation

In-house environmental, electrical, EMC, fire, and TVAC testing. Cross-tech (RF/FO/LF) CAD design. Additive manufacturing and injection moulding for prototyping and serial products.



Key Features and Benefits

- **High Performance:** Our low-loss, highly flexible, and low-SWaP (size, weight, and power) technologies rigorously ensure reliable and durable connectivity of signal and power.
- **Doing More with Less:** Lower component weight and size contribute to longer missions, greater fuel efficiency, and enhanced capabilities.
- **Rugged Design:** Our compact and durable product lines include sealed, hermetic solutions, guaranteed functionality across the extremes of aerospace operating environments including high shock and vibration resistance. Moreover, we offer solutions for dynamic applications.
- **Connectivity Solutions:** Regularly we combine our products into connectivity network architectures tuned to precisely meet the specificities of our customers.

Broad Cross-Technological Portfolio

Deep vertical integration across RF, fiber optics and low-frequency components and systems.

Radio frequency Connectors	Fiber optics Connectors	Low frequency Databus cables
		
Cables	Cables	High voltage cables
		
Cable assemblies	Cable assemblies	Cable harnesses
		
Antennas	Fiber distribution	Power & signal distribution
		
System solutions	Active equipment	Customized solutions
		

Heritage

With a proven track record in airborne defense and civilian applications, HUBER+SUHNER is a trusted partner, backed by extensive engineering and testing resources. We take pride in our extensive heritage providing rugged connectivity to the world's most recognized UAS programs.

Scan the QR codes to learn more



Advanced Air Mobility



**Airborne & Unmanned
Aerial Systems (UAS)**

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HUBER+SUHNER is certified according to ISO 9001, ISO 14001, OHSAS 18001, EN(AS) 9100, IATF 16949 and ISO/TS 22163 – IRIS.

Waiver

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