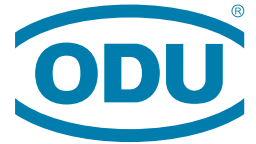


A PERFECT ALLIANCE.



ODU AMC[®] HIGH-DENSITY

Advanced Military Connector Solutions

MINIATURE CONNECTORS



SMALLER

FASTER

LIGHTER

ODU AMC[®] High-Density is a miniature connector solution designed for harsh environment applications. It is used extensively in soldier communications and future soldier systems that require significant weight and space reduction such as: field radios, portable computers, night vision and digital scopes.

The compact and lightweight connector offers high performance data transmission, high reliability and easy handling.

In shell diameters as small as 10 mm up to 18.5 mm and providing a maximum of 40 contacts, the ODU AMC[®] High-Density includes numerous high density signal configurations and tailored versions for power (up to 15A) and data transfer (USB[®] 3.1 Gen1¹ with 5A power) in a very compact package.

¹ These ODU specific connectors can transmit common data transmission protocols such as USB[®] 3.1 Gen1, but they are not USB[®]-standard connectors.

COMPACT DESIGN

Mechanical and electrical robustness and reliability despite miniature size

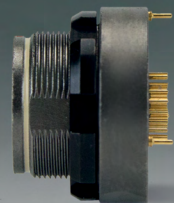


SMALLEST DIMENSIONS

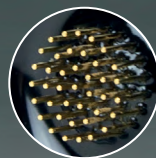
Diameter less than 10 mm (Size 00, 7 contacts)



7 mm

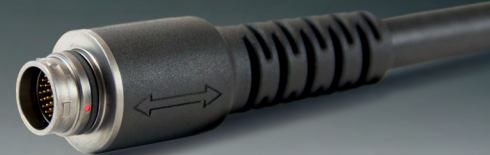
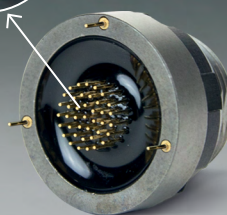


12 mm



HIGH CONTACT DENSITY

Contact density up to 40 contacts in a space-saving design



SYSTEM SOLUTION

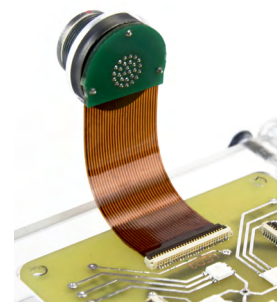
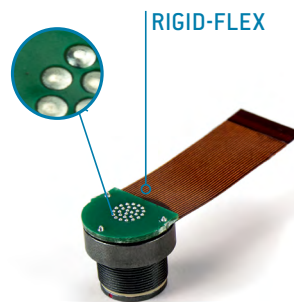
Innovative options for assembly and extrusion for the cable strain relief

FEATURES

- 2 up to 40 poles
- 4 sizes
- Watertight protection class IP68
- Versatile and individually configurable: Signal, power and data possible within one connector
- >5,000 mating cycles durability
- Break-Away function for maximum safety
- Extremely robust and stable housing with non-reflecting surface
- Operating temperature range from -51° C [-60° F] to +125° C [+257° F]
- Contacts for solder and PCB termination
- Light, compact and easy to use – blind mating option
- Data transfer USB® 2.0 + USB® 3.1 Gen1¹
- Mechanical and visual colour coding
- Salt spray resistance
- System solution

TERMINATION PC-BOARDS

ODU AMC® high-density device components can be supplied for direct attachment to the board or as rigid-flex-solution. The solder process is tested and suitable for all available inserts.



Shell size	Number of contacts	Suitable for	Termination		Max. Wire size	Max. current ³	Test voltage acc. SAE 13441	Rated voltage ⁴
			PCB ² only GK style	Soldercup				
00	02	Power	•	•	2 x AWG 24	3A	1,200	300
	04	Signal	•	•	4 x AWG 28	1A	900	300
	04	USB® 2.0 ¹	○	•	2 x AWG 28	1A	750	250
					2 x AWG 24	3A		
07	Signal	•	•	7 x AWG 28	1A	750	250	
0	09	USB® 2.0 ¹ + Power	○	•	3 x AWG 28	1A	750	250
	12	USB® 3.1 Gen1 ¹ + Power	○	•	6 x AWG 22	5A		
					10 x AWG 28	1A	750	250
16	Signal	•	•	16 x AWG 28	1A	750		
1	27	Signal	•	•	27 x AWG 28	1A	750	250
1.5	40	Signal	•	•	40 x AWG 28	1A	750	250

All dimensions are in mm. Some figures are for illustrative purposes only. Subject to change without notice. Errors and omissions excepted. We reserve the right to change our products and their technical specifications at any time in the interest of technical improvement. This publication supersedes all prior publications. This publication is also available as a PDF file that can be downloaded from www.odu-connectors.com

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¹ These ODU specific connectors can transmit common data transmission protocols such as USB® 3.1 Gen1, but they are not USB®-standard connectors. ² Layout on request ³ Single contact load ⁴ Maximum operating voltage at sea level up to 2000 m acc. To SAE 13441. For various applications the safety requirement regarding the operating voltage is even more severe. This must be evaluated during the time of equipment engineering. ○ On request