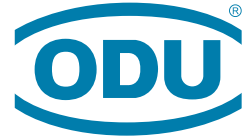


A PERFECT ALLIANCE.



ODU AMC[®] HIGH-DENSITY

Advanced Military Connector Solutions

MINIATURE CONNECTORS



SMALLER

LIGHTER

FASTER

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 as many as 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 3.0 with 5A power) in a very compact package.

COMPACT DESIGN

Mechanical and electrical robustness and reliability despite miniature size

HIGH CONTACT DENSITY

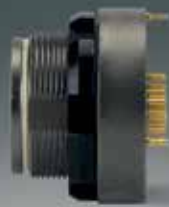
Contact density up to 40 contacts in a space-saving design

SMALLEST DIMENSIONS

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



7 mm



12 mm



SYSTEM SOLUTION

Innovative options for assembly and extrusion for the cable strain relief

FEATURES

- 2 – 40 poles
- 4 sizes
- Watertight protection class IP 68
- 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 3.0
- Mechanical keying and visual colour coding
- Salt spray resistance
- System solution

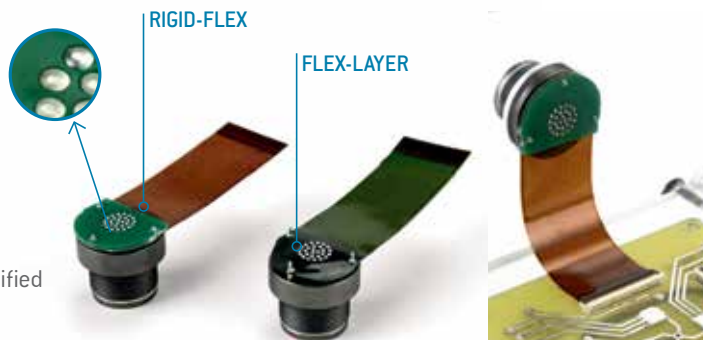


BENEFITS

- Miniature footprint
- Compact and robust design
- High contact density
- High degree of sealing to protect from dust and water in both mated and unmated condition
- High durability
- Fast & safe connect and disconnects versatility, individual configurations
- 4 Keying options to prevent mismatching
- Trouble-free data transfer
- Reduced interconnection damage

TERMINATION PC-BOARD

ODU AMC High-Density receptacles can be terminated with PC-boards, flex-layers or rigid-flex solutions. The solder process is tested and qualified for all available inserts.



TECHNICAL DETAILS

Shell size	Number of contacts	Suitable for	Termination		Max. Wire size	Max. current ²	Test voltage V acc. SAE 13441	Rated voltage ³ V
			PCB ¹ 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	○	•	2 x AWG 28 2 x AWG 24	1A 3A	750	250
	07	Signal	•	•	7 x AWG 28	1A	750	250
0	09	USB 2.0 + Power	○	•	3 x AWG 28 6 x AWG 22	1A 5A	750	250
	12	USB 3.0 + Power	○	•	10 x AWG 28 2 x AWG 22	1A 5A	750	250
	16	Signal	•	•	16 x AWG 28	1A	750	250
1	27	Signal	•	•	27 x AWG 28	1A	750	250
1.5	40	Signal	•	•	40 x AWG 28	1A	750	250

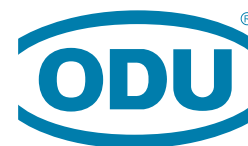
¹ Layout on request

² Single contact load

³ 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



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