The Modular Docking Interface for power and signal distribution allows a high flexibility due to the integration of the ODU-MAC® as well as high compensation of misalignments and offers more than 10,000 mating cycles.
The MDI is especially for test and measurement applications in the battery testing area of electrical vehicles or hybrid electrical vehicles (EV/HEV) as well as for climate test chambers but can also be used for different applications.

GENERAL FEATURES

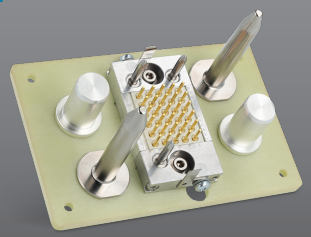
- Available as single components or complete docking system
- Versions:
  - Non-touch-protected (plastic plate thickness: 5 mm)
  - Touch-protected – concept on request
- Mating cycles: > 10,000
- Misalignment compensation:
  - Xy-direction for the complete system: ± 2 mm
  - Z-direction (mating direction): max. 3 mm
- PE via separate contact pair
- Grounding termination for touchable metal parts (guiding system)

MODULAR DOCKING INTERFACE (MDI)

SIGNAL CONTACTS

- Standard ODU-MAC® Silver-Line S+ frame with 2x mounting bolt spring-loaded
- 12 units for flexible configuration
  - Misalignment z-direction (mating direction): max. 3 mm
  - Max. mating force of the ODU-MAC® configuration: 100 N
- Temperature range –40 °C up to +125 °C

EXAMPLE



POWER CONTACTS

- Nominal current (Δ30K heating) / sizes:
  - 315 A (Ø16 with 95 mm²)
  - 500 A (Ø24 with 240 mm²)
  - 865A (Ø30 with 2x240mm²)
- Nominal voltage:
  - ODU LAMTAC® 1,500 V DC / 1,000 V AC
- Termination via DIN cable lug / flexible copper terminals
- Temperature range –40 °C up to +150 °C