

DURASWAP™ Connectors

HIGHLY DURABLE SWAPPABLE DOCKING CONNECTOR

The swappable custom battery connector solutions are offered in 2 power & 6 signal configurations. These connectors are capable of carrying a continuous current of 15A-70A with 10,000 mating cycles. They are IP67 rated in mated and unmated conditions.

- Contact system can carry up to 70A continuous current and withstand 10,000 mating cycles
- Connector supports blind mating with a float of $\pm 2\text{mm}$
- IP67 rated in mated and unmated condition
- FMLB for power terminals to prevent hot plugging
- PokaYoke to avoid mismatching with FMLB for power terminals



TARGET MARKETS



FEATURES

- Supports 10,000 mating cycles
- Up to 70A of continuous rated current
- 2 Power & 6 Signal configuration
- Guide pins
- UL94V-0-rated housing materials
- Operating temperature from -20°C to $+90^\circ\text{C}$
- Metal bush for panel fastening

BENEFITS

- Highly durable
- Efficient charging
- Application flexibility
- Enables blind mating
- Ensures application safety
- Suitable for wide range of application environments
- Takes torque loads for efficient panel IP sealing

TECHNICAL INFORMATION

MATERIAL

- Housings: Polyamide Thermoplastic UL94V-0 rated
- Material for Seal: Silicone Rubber, UL94 rated
- Terminals: High-Performance Copper Alloy

MECHANICAL PERFORMANCE

- Mating Cycles: 10000 cycles
- Operating Temperature Range: -20°C to 90°C

ELECTRICAL PERFORMANCE

- Rated Current: 70A (16SQMM)
- Dielectric Withstanding Voltage: 500VDC
- Insulation Resistance: >1GΩ

PACKAGING

- Bulk Packaging

ENVIRONMENTAL

- IP67 (Mated and unmated condition)

APPROVALS AND CERTIFICATIONS

- UL (employed UL-certified material-connector level pending)

SPECIFICATION

- Amphenol Application Specification

TARGET MARKETS/APPLICATIONS



Swappable Battery

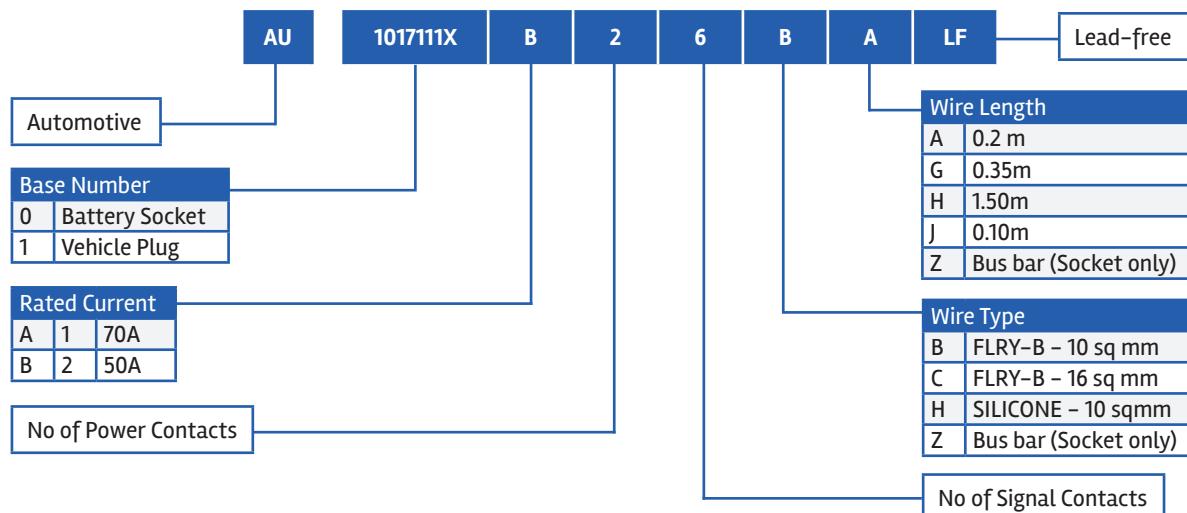


Warehouse



Robotics
Drone

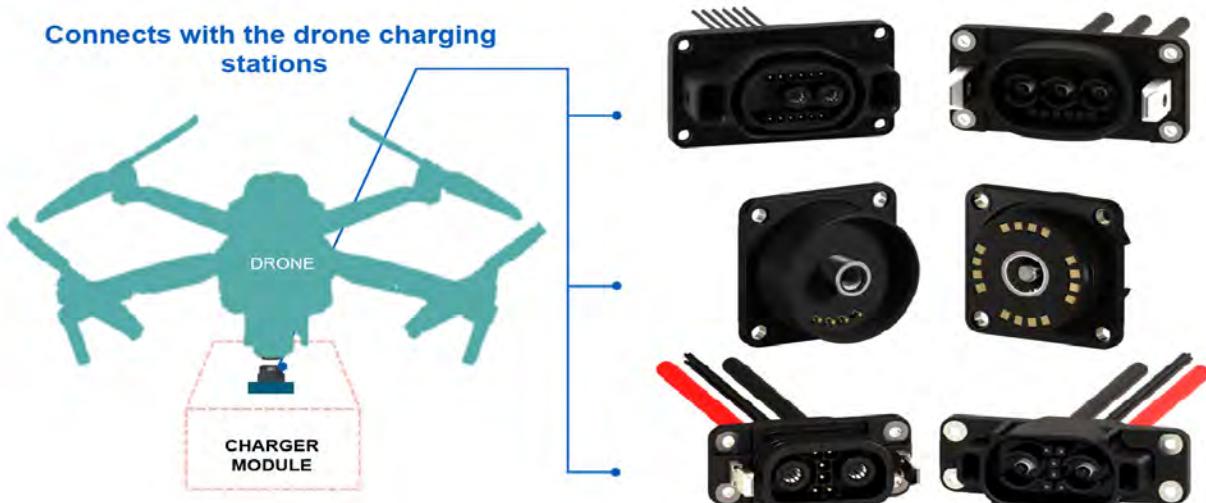
PART NUMBER SELECTOR



PRODUCTS AVAILABLE



APPLICATION – DRONE CHARGING



APPLICATION – EV BATTERY CHARGING AND DISCHARGING

Specifications

- Used in areas where batteries are swappable
- Battery can be mated/unmated blindly without any additional effort
- Mating parts will be on the battery surface and vehicle/charging station
- Mating cycles: 10000
- Power: 2 pin 100A/70A continuous
- Signal: 4/6 pins



APPLICATION – WAREHOUSE ROBOTICS



ACPDURASWAP1123EA4