

XT60 and XT30 High-Current Battery Connectors

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Electronics & Prototyping

XT60 connectors (rated 60 A) and XT30 (30 A) are the standard battery connectors for drones, robots and power packs, with bullet contacts that solder easily and housings that hold tight yet separate under pull.

Key Features

- XT60: 60 A rated
- XT30: 30 A, smaller
- Bullet contact soldering
- Polarised housings
- Silicone wire friendly

Typical Uses in the Workshop

- Connect LiPo batteries to drones and robots
- Power modules and chargers
- Replace worn JST connectors
- High-current project wiring

Safe Operation

1. Tin the wire and contact
2. Solder the contact quickly without melting the housing
3. Click the contact into the housing
4. Mate and twist-lock the pair
5. Heat-shrink the joint

SAFETY NOTES

- Battery current can arc - connect before powering up
- Check polarity marking before mating
- Protect exposed contacts with caps
- Do not exceed the rated current
- Inspect for damaged housings

Maintenance & Consumables

- Check contacts for heat damage
- Re-solder loose bullets
- Keep housings in stock
- Clean with contact cleaner
- Store connectors sorted

Specification & Buying Notes

Buy XT60s for robot batteries and XT30s for smaller packs, with a few spare housings. Quality gold contacts solder clean; cheap plated bullets pit.