XT30U

Amass XT30 power connector – 1 pair (male + female), black

User manual



Read this manual before soldering and before connecting a battery for the first time.

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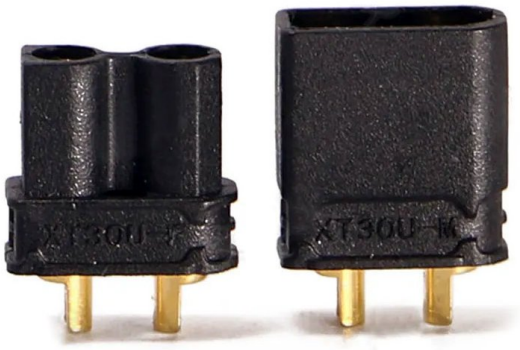
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1. Product description

1.1 What it is for

The package contains one pair of **Amass XT30U** power connectors in black – a male connector **XT30U-M** and a female connector **XT30U-F**. XT30 connectors are mainly used to connect a battery to a smaller drone or to a charger. It is a two-pole DC connector that is soldered onto the ends of the power wires.

The housing has chamfered corners on one side, so the male and female connectors can only be mated in one orientation. The manufacturer specifies the female connector (XT30U-F) for the battery side and the male connector (XT30U-M) for the load side, for example the flight controller (FC) or the electronic speed controller (ESC).

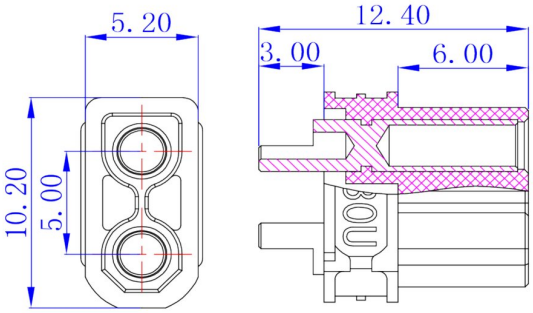


Female connector XT30U-F (left) and male connector XT30U-M (right)

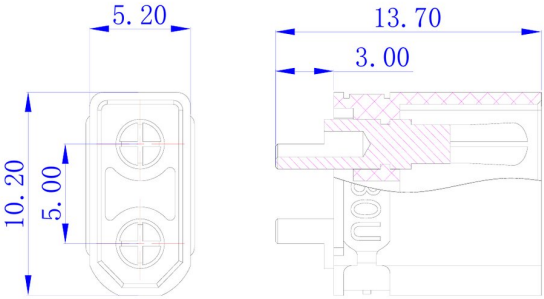
1.2 Technical data and package contents

Manufacturer	Changzhou Amass Electronics Co., Ltd. (Amass)
Manufacturer contact	Zhaojiaqiao 168, Xinchen Village, Lijia Town, Wujin District, Changzhou, Jiangsu, China; hzy@china-amass.com; www.china-amass.com
Product designation	XT30U-M (male), XT30U-F (female)
Housing colour	black
Number of poles	2
Max. voltage	500 V DC
Rated current	15 A (18 AWG wire)
Max. continuous current	20 A (16 AWG wire, temperature rise < 85 °C)
Momentary current	30 A
Contact resistance	0.70 mΩ
Contact material	brass
Housing material	PA (polyamide), flammability UL94 V-0
Protection rating	IP40
Operating temperature	−20 °C to 120 °C
Mechanical life	100 mating cycles
Female dimensions	10.2 × 5.2 × 12.4 mm
Male dimensions	10.2 × 5.2 × 13.7 mm
Contact pitch	5.0 mm
Package contents	1× male connector XT30U-M, 1× female connector XT30U-F
Not included	wires, heat-shrink tubing, solder and soldering equipment; the connectors are supplied without wires

Data according to manufacturer Amass documents (XT series catalogue and XT30U-M and XT30U-F drawings).



Dimensional drawing of the female connector XT30U-F (dimensions in mm)



Dimensional drawing of the male connector XT30U-M (dimensions in mm)

2. Use

2.1 Safety instructions

- Do not exceed the rated current or the maximum voltage of the connector. Overloading causes overheating and may lead to failure or fire.
- Never solder wires that are connected to a battery or another power source. There is a risk of short circuit and burns.
- When soldering wires coming from a battery, make sure that the stripped ends of the positive and negative wires never touch.
- The solder and the soldering iron tip are very hot. Work on a non-flammable surface in a well-ventilated area and do not touch the metal parts of the connector until they have cooled down.
- Do not connect or disconnect the connectors under load (for example with the motors running).
- Replace a damaged, deformed, blackened or loosely fitting connector immediately.
- Keep out of the reach of children – small parts may be swallowed.

2.2 Which connector goes on which side

The **female connector XT30U-F** goes on the **power source** side (battery, charger output lead). The contacts of the female connector are recessed in the housing, so they cannot be touched easily when handling a charged battery and the risk of a short circuit is lower.

The **male connector XT30U-M** goes on the **load** side (power leads of the drone, flight controller or speed controller).

2.3 Soldering the wires

The manufacturer recommends **18 AWG** wire (rated current 15 A); for currents up to 20 A it specifies 16 AWG wire. Procedure:

① Slide a piece of heat-shrink tubing onto each wire and move it far enough away from the soldering point so that it does not shrink prematurely.

② Strip the end of the wire to the length of the connector's solder cup and twist the strands.

③ Tin the end of the wire and the solder cup of the connector.

④ Mate the connector with its counterpart while soldering. This keeps the contacts in the correct position.

⑤ Solder the wires. Watch the polarity – the positive wire (usually red) and the negative wire (usually black) must be on matching contacts on both sides of the connection. Solder quickly so that the housing does not overheat and deform.

⑥ Once cooled, slide the tubing over the soldered joints up to the housing and shrink it.

⑦ Check that the joints are shiny and solid, that no solder or wire strands remain between the contacts and that the connector mates smoothly with its counterpart.

※ Before connecting a battery for the first time, check the polarity of the newly soldered connector, e.g. with a multimeter. Reverse polarity can permanently damage the device.

2.4 Connecting, disconnecting and inspection

- When connecting and disconnecting, hold the connector by its plastic housing, never pull on the wires.
- Insert the connectors straight and fully, all the way in. An incompletely inserted connector has a higher contact resistance and heats up.
- Disconnect the battery from the device after flying or charging.
- Keep the contacts clean and dry. The connector is rated IP40 – it is not protected against water.
- Inspect the connector regularly. If it fits loosely, is hot to the touch, discoloured or has a damaged housing, replace it. The manufacturer states a mechanical life of 100 mating cycles.

3. Information for the EU and Czech Market

3.1 Importer and responsible person in the EU

The product is placed on the European Union market by the importer stated below, who is at the same time the responsible person within the meaning of Article 16 of Regulation (EU) 2023/988 of the European Parliament and of the Council on general product safety (GPSR).

Importer / responsible person in the EU	Rotorama, s.r.o.
Company ID (IČO)	051 57 692
VAT ID (DIČ)	CZ05157692
Registered office	Okrajová 1351, 674 01 Třebíč, Czech Republic
E-mail	info@rotorama.cz
Phone	+420 252 252 098
Website	www.rotorama.com

3.2 Disposal



- The crossed-out wheeled bin symbol on the product, its packaging or in the documentation means that at the end of its service life the product **must not be disposed of together with mixed municipal waste**.
- Hand it over at a take-back point for electrical equipment – at a collection yard, at a take-back point of a collective system, or at the retailer when purchasing a new equivalent product. Take-back is free of charge for the end user.
- The obligations under Act No. 542/2020 Coll., on end-of-life products, are fulfilled by the importer through a collective take-back system.
- Proper disposal helps prevent negative impacts on the environment and human health and contributes to the reuse of secondary raw materials.

Through its contractual partner **ASEKOL a.s.**, the company ensures the take-back of waste electrical equipment from households and the separate collection of waste electrical equipment, batteries and accumulators in accordance with the applicable legislation. The customer is entitled to hand over old electrical equipment or a battery or accumulator at any collection point of the above contractual partner. The addresses of these take-back points are listed at www.asekol.cz, www.ecobat.cz and also https://visoh2.mzp.cz/RegistrMistZO/RegistrMistZOPublic/MapaMistZpetOdberu.

4. Warranty and rights arising from defective performance

The rights and obligations of the contracting parties are governed by Czech law, in particular by Act No. 89/2012 Coll., the Civil Code, and Act No. 634/1992 Coll., on consumer protection.

- The seller is liable to the buyer for the product being free of defects on receipt. If the buyer is a consumer, a defect may be notified **within two years of receipt** of the product (Section 2165 of the Civil Code).
- If a defect appears within **one year** of receipt, the product is deemed to have been defective already at the time of receipt (Section 2161(5) of the Civil Code).
- When purchasing online, a consumer has the right to **withdraw from the contract within 14 days** of receiving the goods without giving a reason (Section 1829 of the Civil Code).
- Claims should be made with the retailer from whom you purchased the product. The importer's contact details are given in Chapter 3.1.
- The competent body for out-of-court settlement of consumer disputes is the **Czech Trade Inspection Authority**, Štěpánská 796/44, 110 00 Prague 1, www.coi.cz.

※ The information in Chapters 3 and 4 describes the situation in the Czech Republic. If you use the product in another country, the law of the country in which you operate it is decisive.