Amass XT60EW-M

XT60 panel-mount connector – male
User manual



Read this manual before mounting and keep it for future reference.

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1. Product description

1.1 What it is for

Amass XT60EW-M is a two-pin power connector (male) designed for fixed panel mounting. It is compatible with the standard XT60 connector – you can plug in a battery or a cable terminated with an XT60 female connector. The contacts are made of gold-plated brass and the wires are attached to them by soldering.

The connector has a flange with two mounting holes. It allows you to screw the connector easily to a drone frame, a device panel or a 3D-printed holder, so that it stays firmly in place and neither the soldered joints nor the wires are stressed when the battery is connected and disconnected.



Amass XT60EW-M – view of the mating side

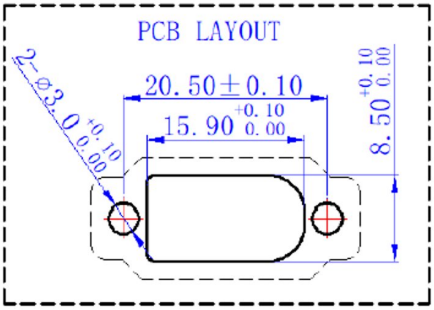
1.2 Specifications and package contents

Product designation	Amass XT60EW-M (manufacturer's catalogue: XT60EW-M.G.B)
Manufacturer	Changzhou Amass Electronics Co., Ltd., China, www.china-amass.com
Type	2-pin panel-mount connector, male, solder terminals, 180° wire exit
Mating connector	XT60 female connector
Rated current	max. 35 A (12 AWG wire, temperature rise up to 85 K)
Withstand voltage	500 V DC
Contact resistance	≤ 1.2 mΩ
Insulation resistance	≥ 2000 MΩ
Operating temperature	−20 °C to 120 °C
Mechanical life	100 mating cycles
Material	housing PA (polyamide), contacts gold-plated brass
Flammability	UL94 V-0 (wall thickness 0.8 mm)
Salt spray resistance	48 h
Dimensions	flange 27.1 × 12.1 mm, length 16.7 mm
Mounting	2 holes, spacing 20.5 mm; nut thread diameter 2.5 mm
Colour	black
Package contents	1× XT60EW-M connector (male)
Not included	XT60 female mating connector, screws and nuts, wires, heat-shrink tubing

2. Use

2.1 Preparing the mounting cut-out

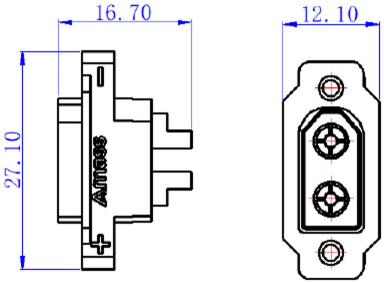
The connector is inserted into a cut-out in a panel, frame or holder and fastened with two screws through the holes in the flange. Dimensions of the cut-out and mounting holes according to the manufacturer's drawing:



Recommended panel cut-out according to the manufacturer (dimensions in mm)

- cut-out for the connector body: **15.9 × 8.5 mm** (tolerance +0.1 / 0 mm),
- two mounting holes **Ø 3.0 mm** (tolerance +0.1 / 0 mm),
- mounting hole spacing: **20.5 mm** (±0.1 mm).

The nut thread diameter is 2.5 mm. Screws and nuts are not included – choose the screw length according to the thickness of the panel or holder. Tighten the screws gently so that the plastic flange does not crack.



Connector dimensions according to the manufacturer (in mm); the + and − marks on the housing indicate polarity

2.2 Soldering the wires

The manufacturer specifies a rated current of 35 A for a **12 AWG** wire. Use a thinner wire only if a correspondingly lower current will flow through it.

① First slide heat-shrink tubing onto the wires – this will not be possible after soldering.

② Strip and tin the wire ends. Tin the solder terminals of the connector as well.

③ Observe the **polarity**: solder the positive wire (usually red) to the terminal marked “+” on the housing and the negative wire (usually black) to the terminal marked “−”.

④ Solder quickly with a sufficiently powerful soldering iron so that the plastic housing does not overheat and deform. While soldering, keep the connector plugged into its mating connector or fixed in the panel – this keeps the contacts in the correct position.

⑤ After cooling, slide the tubing over the soldered joints and shrink it. Both joints must be reliably insulated from each other.

⑥ Before connecting a battery for the first time, check the polarity and rule out a short circuit between the terminals (e.g. with a multimeter).

2.3 Connecting and disconnecting

- Insert the mating connector (XT60 female) straight and all the way in. The shape of the housing prevents connection with reversed polarity – never force the connector in.
- When disconnecting, always hold the connector housing; never pull on the wires.
- The manufacturer specifies a mechanical life of 100 mating cycles. With frequent connecting and disconnecting, check that the contacts hold firmly – replace a loose connector.

3. Safety and maintenance

- Li-Po and LiHV batteries deliver very high currents. A **short circuit** between the terminals can cause burns, melting of the wires or a battery fire. Always keep the battery disconnected while soldering and mounting.
- Do not exceed the rated current of 35 A specified by the manufacturer. A continuously higher current causes the connector to overheat.
- Do not operate the connector outside the operating temperature range of −20 °C to 120 °C. A connector too hot to hold in your hand is overloaded or has a poor contact.
- Replace a damaged, deformed, blackened or burnt connector immediately, as well as a connector whose contacts do not hold firmly when mated.
- Keep the contacts clean and dry. Do not consider the connector waterproof.
- Keep the connector out of the reach of small children – it contains small parts.
- When using the product, follow the regulations of the country in which you use it.

4. Information for the EU and Czech Market

4.1 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

4.2 Disposal of electrical equipment



- 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.

5. 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 4.1.
- 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.