

The background of the entire page is a dark grey to black tiger-stripe pattern. The stripes are vertical and vary in width and intensity, creating a textured, naturalistic look.

tigerexped

FOR PROFESSIONALS EN

TEXU Edition V1

INTRODUCTION

tigerexped does not only supply products and equipment for recreational vehicles and marine use – **we also stand for:**

- years of practical experience in self-sufficient, individual travel
- best technical know-how and in-house development
- distribution of leading brands
- own range of products, that either improve and rethink solutions, or newly developed meeting special demands

Our passion is **product development and improvement**. The fact, that some solutions have been on the market for many years does not mean, that there is no potential for improvement. As a result you can find several high quality products and components that are exclusively available through the tigerexped network.

In addition to our high quality product portfolio we offer exclusive availability of our thoroughly trained technical support staff as well as a access to a dedicated **info hub for professionals**, containing datasheets, 3D construction files etc.

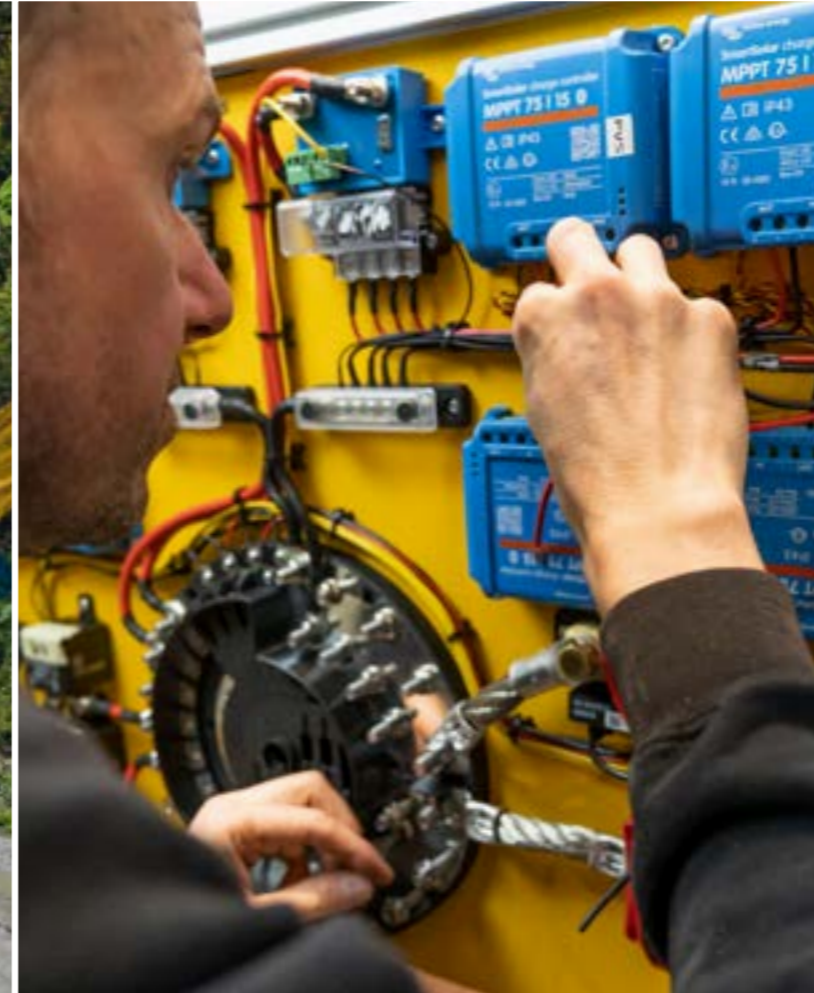
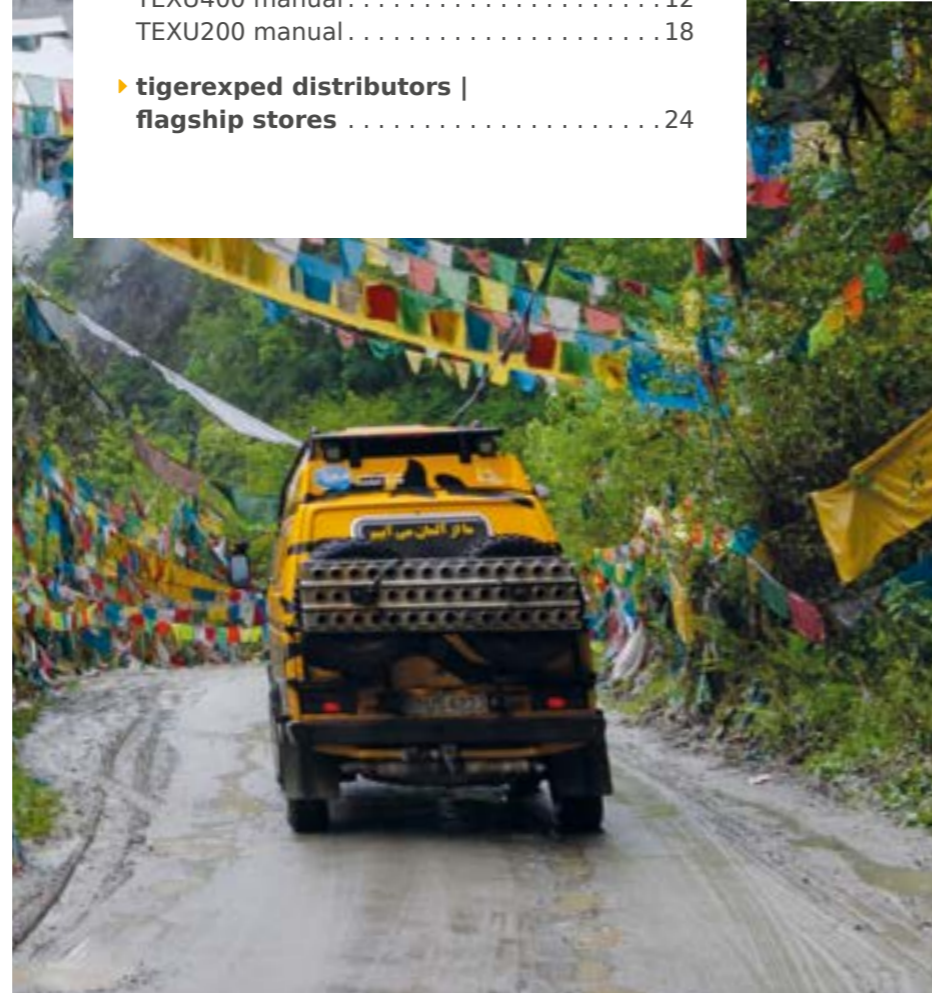
Furthermore we offer special bulk packages for OEMs to reduce waste during the manufacturing process of the vehicle.

To help with your installations and sales, we also organize **certification trainings** for several products and suppliers for your staff.

What are your needs and interests? Which parts of our portfolio appeal the most to you? We are happy to find out more about your business and how we can benefit from each other, so do not hesitate to get in contact with us!

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WELCOME TO THE REVOLUTION OF POWER DISTRIBUTION

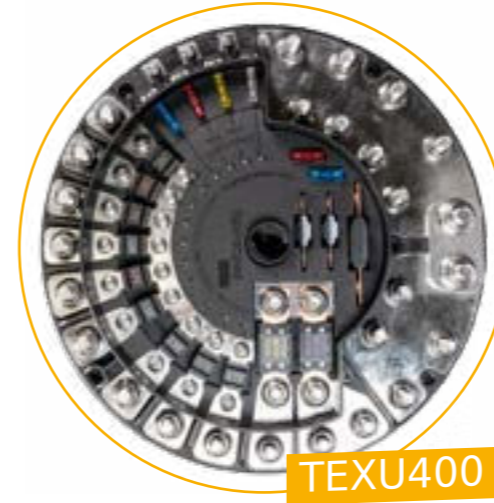
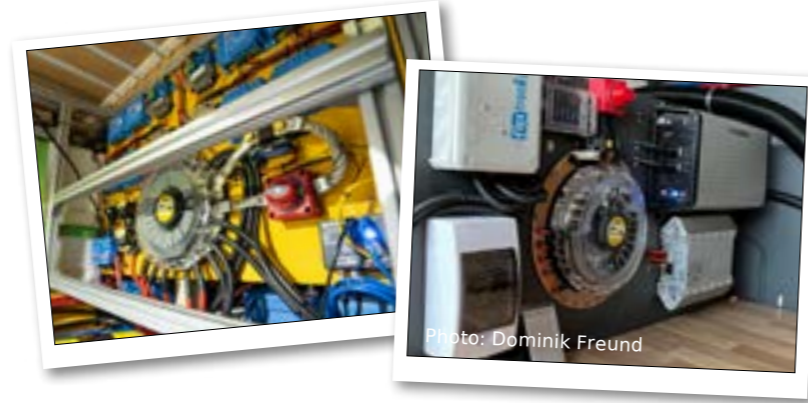


Finding and eliminating weak points, to add value to our customers' products and creations – **the driving force of our product development efforts.**

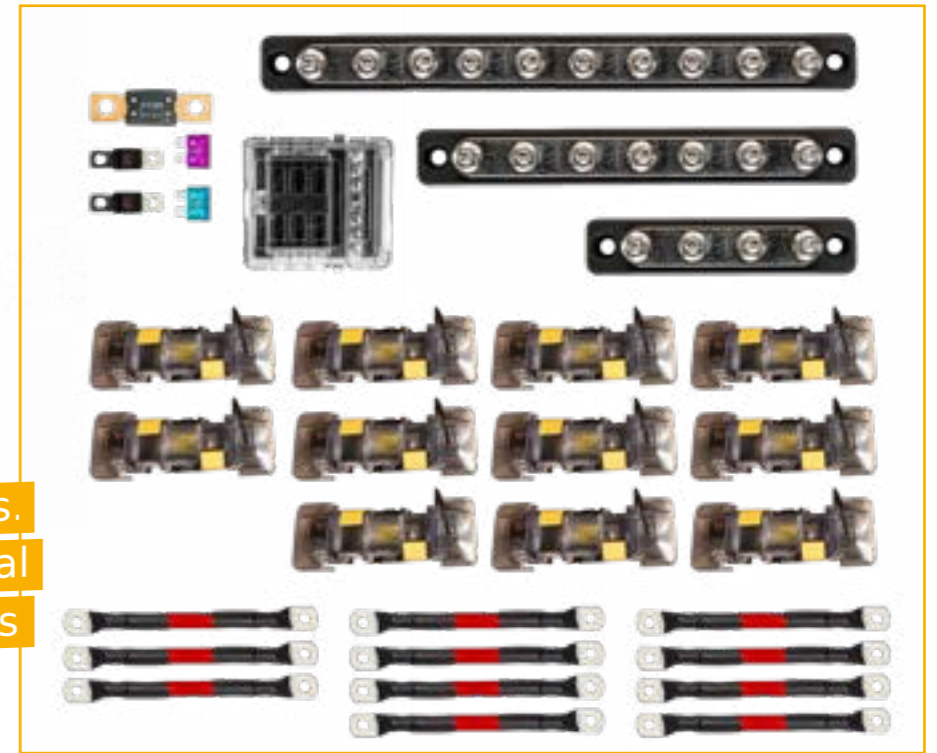
Savings potential, cast into shape.

Power distribution blocks, developed by **tigerexped**, will enable installations of electrical systems via plug & play.

Independent of system providers, **TEXU400** and **TEXU200** enable an unprecedented **savings potential in combination with more safety due to lower heating and load reserves** – patent pending.



TEXU400 vs.
conventional
components



Your benefits at a glance ...

for you as a manufacturer:

less expensive working time per vehicle and production capacities freed up again more quickly

fewer additional components and supplies to be purchased

potentially fewer support requests after sale of the vehicle, **as possible sources of error such as cable crimps are reduced by 50%**

Faster handling of incoming support requests due to groundbreakingly simple diagnostic possibility by the end customer

for your customer:

less space required for the electrical installation compared to manufacturers, who produce with conventional products

improved overview and simplest troubleshooting, even for non-experts

for your shop range:

strong arguments of cost, error and space savings provide an advantage over ranges without TEXU200/400, as well as a high chance of **system sales with other electrical components.**

professional customer service on the product ranging from spare parts quotation to installation videos that can be integrated into your shop

for your shop's end customer:

revolutionary simplification of electrical installation for amateurs

significantly lower risk of errors in relation to a conventional installation

less time spent

less space needed in the vehicle

The new standard in travel vehicle electrics

The **TEXU200 and TEXU400 distribution blocks** developed by tigerexped only really reveal what they are made of at second glance.



A circular fuse holder? Well, among other things. Because a round shape allows more connections in the same area than a rectangular shape. However, the TEXUs are MUCH MORE than that, **combining multiple components and their range of functions in one compact device**. For you, this combination brings unprecedented benefits. You save money on purchasing as well as on **labour hours, reduce sources of error** and **relieve your support staff**. In addition, **enormous space savings** enable you to offer installation solutions that your customers will love, because the space can be used by them for things they find more attractive.

These are also significant advantages **for your store customers**, which can ONLY be found like this in the TEXU (patent pending) - it will thus play an extremely important role in in future product portfolios.

How exactly are these benefits achieved?

A TEXU is supposed to save space?

A TEXU replaces **busbars and high-current fuse holders**, whose installation and electrical connection would require space. Both, test arrangements and practical application, **saved up to 50% space when installing the electrical system**.

FACTOR: SPACE



The power distribution block replaces all bulky busbars and high current fuse holders of the system

Why is the system installation faster with TEXU?

Instead of installing many individual components, only the mounting of one TEXU is required. The unnecessary cable connections between the components are no longer required and **save 50% of time-consuming crimping work**.

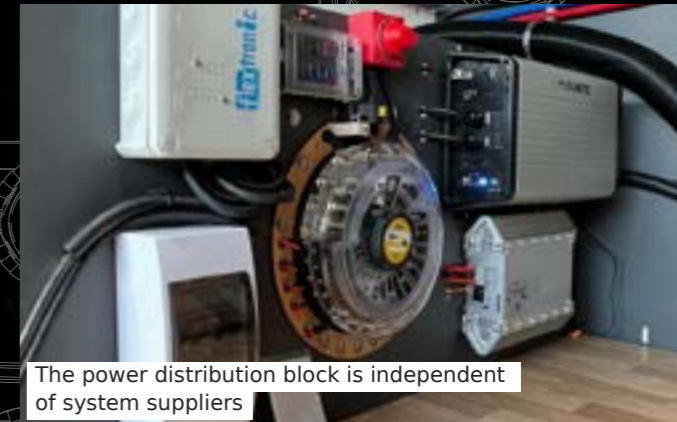
FACTOR: TIME



The power distribution block eliminates the need for expensive cable connections between the conventional components

Fewer sources of error and relieved customer support?

Our power distribution block **eliminates weak points such as contact resistances and screw connections**, which can lead to problems during travel conditions, despite correct installation. In the event of a failure it's instantly visible which segment of the system is affected.



The power distribution block is independent of system suppliers

The TEXU also specifies a far more error-resistant connection of devices of the overall system without intermediate steps. Especially for your store customers, a **reduction of error sources** is a convincing argument. In particular, self-builders need solutions that can compensate for a lack of technical know-how or even, as in this case, take it into account.

FACTOR: COSTS

Isn't the TEXU too expensive?

On the contrary! If you compare the purchase of high-quality individual components, you will already notice the **first cost savings** – not even counting consumables. Furthermore, you not only save costs per vehicle and electrical installation due to **less required working time**, but also gain capacities at an early stage in order to drive the next project into the shop.

Rib with seal in the lid **TEXU200** **TEXU400**

The UFO is **ignition protected according to ISO8846 / UL1500** with the integrated, circumferential rib. It may therefore also be installed in the engine compartment.

Centered lock **TEXU200** **TEXU400**

The centered lock on the cover allows **one-handed opening and closing** of the UFO at any mounting location.

Positive busbar **TEXU200** **TEXU400**

for on-board batteries and consumers. TEXU400 with 2 × MEGA with max. 400A, 9 × MIDI/AMI fuses with max. 175A and 4 × ATP/ATC/ATO fuses with max. 30A. TEXU200 with 2 × MEGA with max. 200A, 3 × MIDI/AMI fuse with max. 120A and 4 × ATP/ATC/ATO fuses with max. 25A.

Blown fuse monitoring **TEXU200** **TEXU400**

Simple error diagnosis: Failure check lights will light up directly at the labeling of the circuits. Thus the previous practice of taking out fuses and searching upside down for faults belongs to the past.

MEGA fuses **TEXU200** **TEXU400**

with **dual terminal connection** on TEXU400 - no stacking of cable lugs or suboptimal alternative constructions necessary anymore! Plus another mega fuse with standard connection. TEXU200 with **1 × mega fuse with standard connection**.

Negative busbar **TEXU200** **TEXU400**

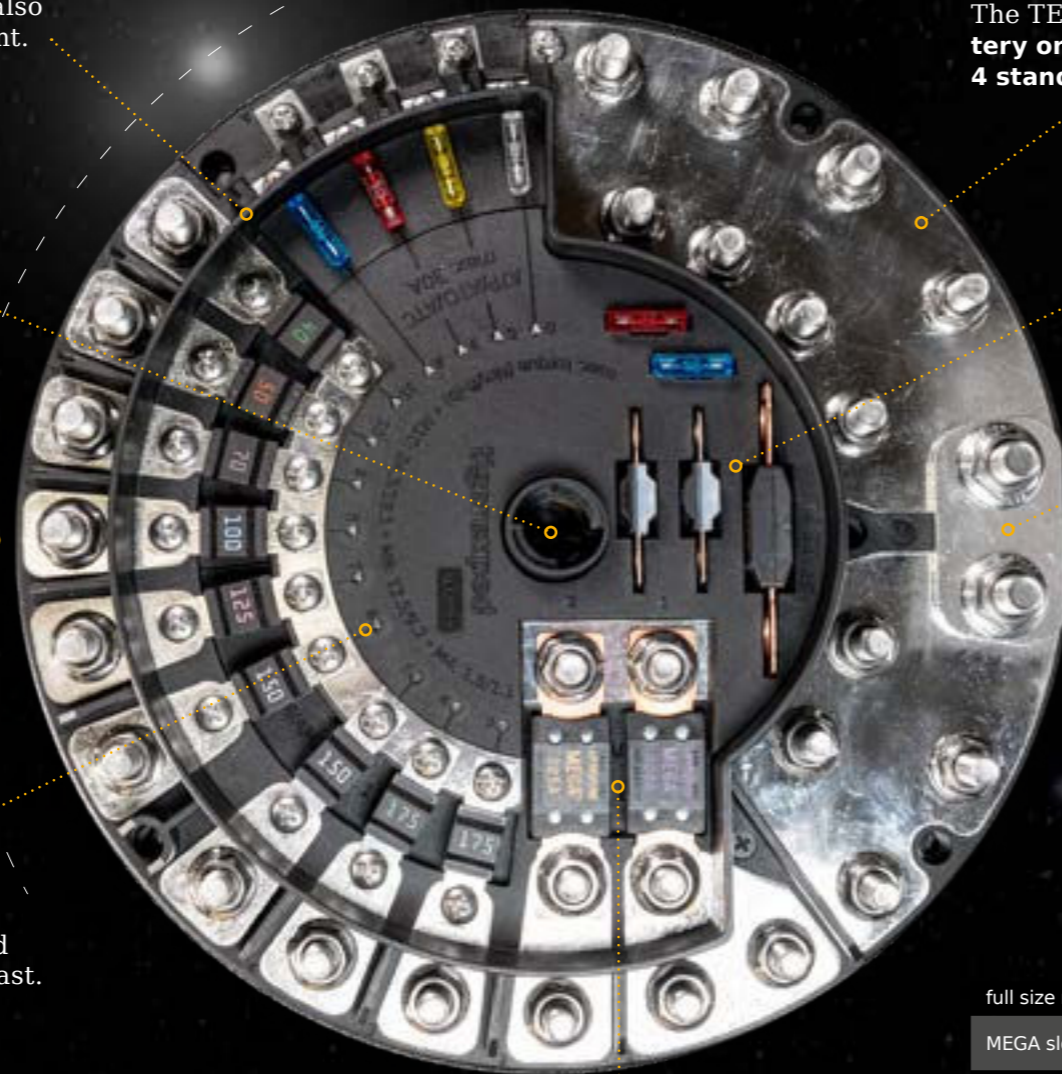
Connect up to **4 battery banks** to the TEXU400, plus up to **10 high current and 4 standard loads**. The TEXU200 is designed for the connection of **one battery or one battery bank with 4 high-current and 4 standard consumers**.

Spare fuses **TEXU200** **TEXU400**

stored handy

Shunt bridge **TEXU400**

The **split negative busbar** enables the **TEXU400** to **integrate a measuring shunt** for the total current in a perfectly uncomplicated way. Simply unscrew and replace with the supplied plastic bar to separate the busbars from the battery and loads.



NEW

The tigerexped power distribution blocks in detail and in operation



You want to know more about our power distribution blocks? Here you will find more technical details, videos on usage and the time-saving installation of the TEXUs.

tiger.jetzt/Zentralelektrik



	TEXU200	TEXU400
full size negative busbar	✓	yes, split design with shunt bridge
MEGA slots	2 × 180A cont. / 200A max.	1 × 150A cont. / 300A max. 1 × 250A cont. / 400A max. (with dual terminal connection)
MIDI slots	3 × 120A max.	4 × 120A cont., 5 × 150A cont. / 170A max.
ATP/ATO/ATC slots		4 × 25A cont. / 30A max.
rib with seal in the lid		ignition protected according to ISO8846 / UL1500
spare fuses	1 × MEGA, 1 × MIDI, 2 × ATP/ATO/ATC	1 × MEGA, 2 × MIDI, 2 × ATP/ATO/ATC
additional features		blown fuse monitoring

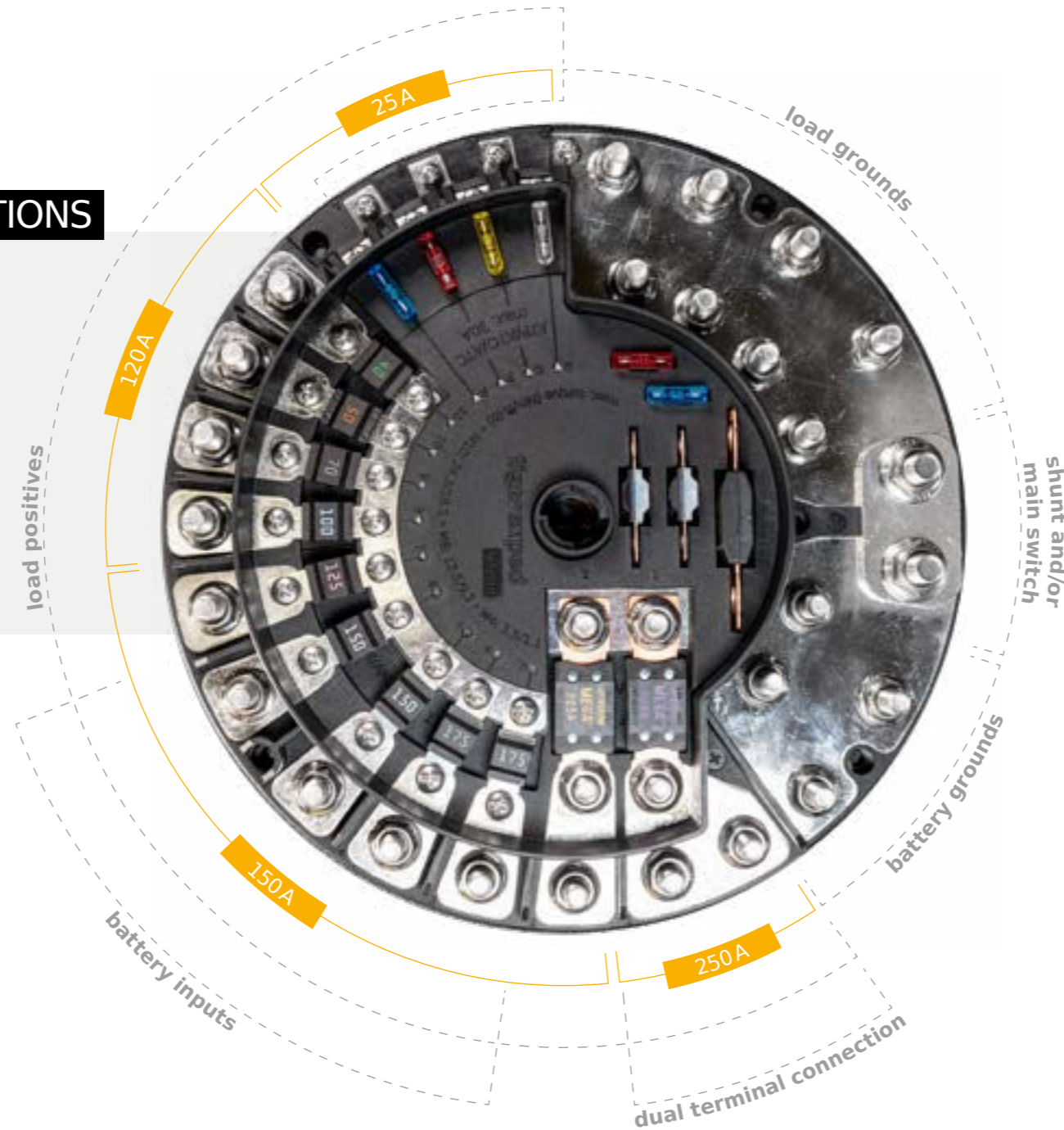
TECHNICAL SPECIFICATIONS & IMPORTANT INSTALLATION INSTRUCTIONS

The **TEXU400** is a high-current DC distributor for a total of 400A. Positive and negative bus bars for connecting batteries / battery banks and loads are integrated, as well as a pre-mounted shunt bridge on a divided negative bus bar for the optional integration of a current measurement device (such as a shunt) and / or a main switch. All individual circuits are protected by means of different fuses (not included!). Blown fuse monitoring is implemented for all connected loads.

TEXU400 is ignition-protected against flammable gases in accordance with ISO8846.

1. SAFETY WARNINGS

Working on electrical systems requires specialized knowledge and should only be carried out by **qualified personnel**. Please also observe the **battery safety instructions** listed in your battery manual.



2. TECHNICAL SPECIFICATIONS

All information on wiring gauges in this document relates to a **maximum ambient temperature of 50° Celsius / 122° Fahrenheit**. We therefore strongly recommend **not to route any cables within cable ducts**. The specified wiring gauges and their maximum current load refer to **open routing** of all cables

2.1 CIRCUIT PROTECTION

The positive bus bar of the TEXU400 integrates connections for **up to four battery banks**, as well as for **up to 10 high-current** and **four standard loads**. Every single circuit is fuse-protected.

⚠ Maximum permissible total current (continuous):
 400A at 35°C / 95° F
 and 350A at 50°C / 122° F.

Note the specifications in the following table:

Type of fuse	max. cable gauge	max. continuous current	max. current intermittent
MEGA-Fuse (Port 1)	2x AWG 2/0 (70 mm²)	250A	300A / max. 30 min 400A / max. 5 min
MEGA-Fuse (Port 2)	AWG 2/0 (70 mm²)	150A	200A / max. 30 min 300A / max. 5 min
MIDI-Fuses (Ports 3 bis 7)	AWG 2/0 (70 mm²)	150A	170A / 30 min
MIDI-Fuses (Ports 8 bis 11)	AWG 1/0 (50 mm²)	120A	
ATO/ATP/ATC		25A	30A / max. 15 min

All data given at a maximum ambient temperature of 50° Celsius / 122° Fahrenheit.



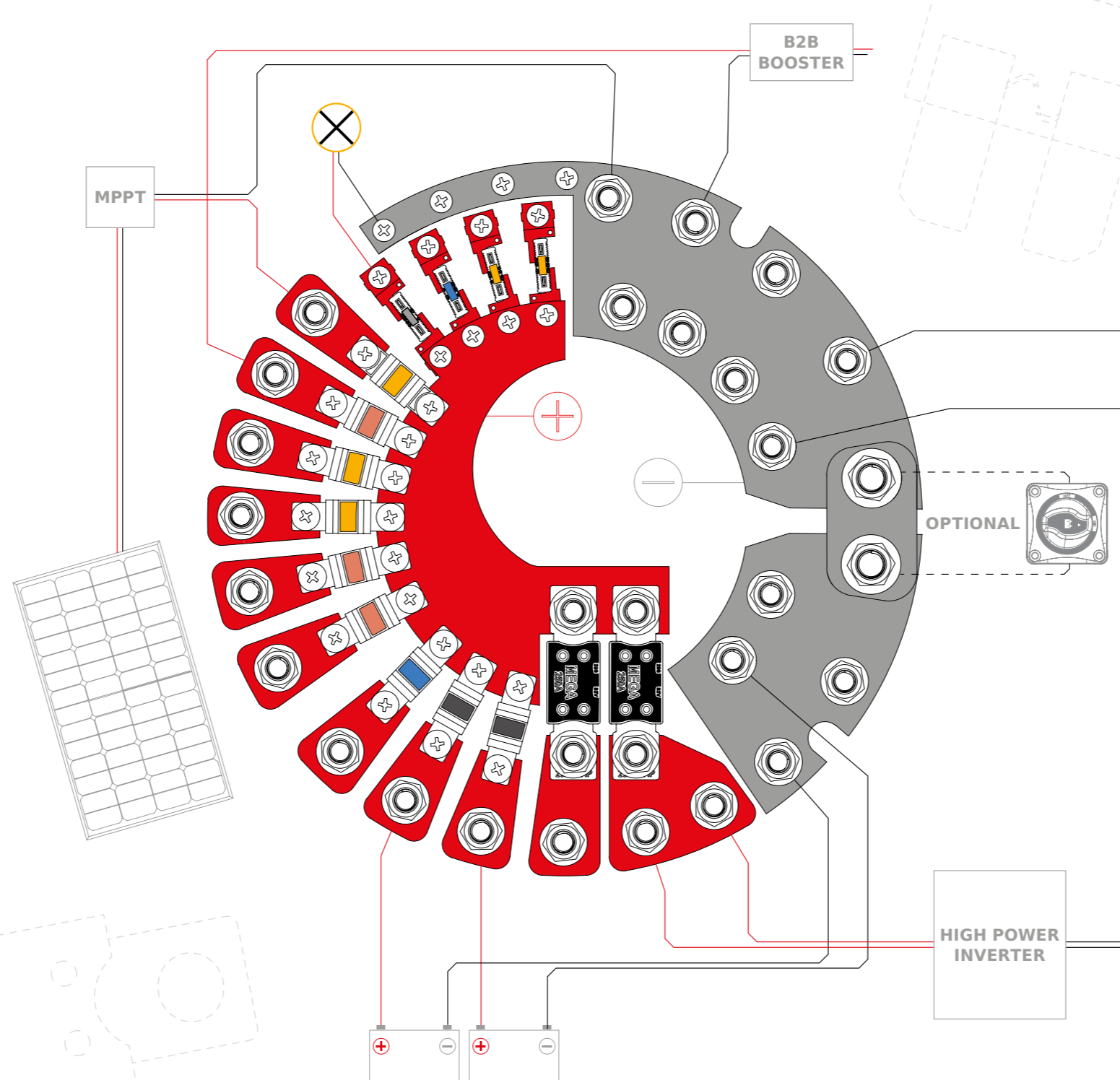
2.1.1 FUSING

On the positive bus bar there are fused ports to connect batteries as well as loads.

The TEXU400 holds space for **a total of 15 fuses**, one for each DC circuit. The spaces are suitable for the installation of **MEGA, MIDI / AMI and ATO / ATC / ATP fuses**.

Always use fuses of correct voltage and amperage. Adjust the fuse ratings to the maximum voltages and currents that can potentially occur in the protected circuit, and remember that the load with the nominal amperage only allows short-term protection. Please refer to the data sheets of the fuse manufacturer and or the device in question regarding this.

Use **fuses with 32V for 12V and 24V systems** and **fuses with 58V for 48V systems**.



2.1.2 BLOWN FUSE MONITORING

Use the stickers included with the TEXU400 to **identify the circuits** and place them on the front cover.

The positive bus bar of the TEXU400 is equipped with **fuse monitoring** for each circuit. For connected loads, a blown fuse detection circuit shows tripped fuses via LED lighting, where the light is being routed through special light guides to the corresponding label on the cover to safely match the fuse in question and the corresponding label for easy identification even when the cover is closed.

Please note: The blown fuse monitoring **only shows defective fuses for connected loads**. The fusing of the batteries and any connected chargers is not indicated by the TEXU400!



Note: To enable the feature of blown fuse indication we intentionally allow a residual current parallel to the fuse. This current can potentially dimly light up very low power devices such as single LEDs within appliances or LED spots of all sorts even when fuse is blown or totally removed! Since this current is limited to around 1mA in 12V systems and around 5mA in 48V systems, this phenomenon does not pose any risk and is perfectly normal behavior.

2.2 BATTERY INPUT WIRING

A different number of battery banks and varying total currents require distinctive configurations of the system with regard to the wiring diameters.

The positive supply is fed in via a **maximum of 4 battery banks**. Connections for max. current re possible with 3x AWG 2/0 (70 mm²) or 4x AWG 1/0 50 mm².

The recommended wiring gauges are listed in the table below. Again, all data shown relates to an ambient temperature of maximum 50°C / 122° Fahrenheit.

	Maximum Permissible Continuous Current			
	150A	200A	300A	400A
one battery	AWG 2/0 (70mm ²)	-	-	-
two batteries	AWG 2 (35mm ²)	AWG 1/0 (50mm ²)	AWG 2/0 (70mm ²)	-
three batteries	AWG 4 (25mm ²)	AWG 2 (35mm ²)	AWG 1/0 (50mm ²)	AWG 2/0 (70mm ²)
four batteries	AWG 6 (16mm ²)	AWG 4 (25mm ²)	AWG 2 (35mm ²)	AWG 1/0 (50mm ²)

3. NEGATIVE BUS BAR

Each port on the positive bus bar has a corresponding bolt on the negative bus bar. The maximum wiring diameter to be used on the negative bus bar also corresponds to their respective counterparts in the positive side - AWG 2/0 (70 mm²) and AWG 1/0 (50 mm²). For diameters ≤AWG 2 (35 mm²), two cable lugs on a single bolt is permissible if needed, provided that this can be achieved in a mechanically sensible manner.



3.1 SHUNT BRIDGE

The split negative bus bar is equipped with a pre-mounted shunt bridge. It can be removed via the two 3/8" (M10) bolt connections and replaced by the supplied insulating divider for integrating a current measuring shunt and / or a main switch.

If the TEXU400 is to be used up to its rated current maximum of 400A, the suitability of the cable used for connection of shunt and main switch must be ensured. If necessary, please order our special non-insulated ground cable to achieve a safe and secure connection:

▶ **tiger.jetzt/texu400**



4. MOUNTING THE TEXU400

- Install in an environment **protected from moisture to avoid corrosion**.
- Choose the mounting location **as close as possible to the batteries** and high-current loads such as big inverters, winches or alike.
- Do not mount directly above lead-acid batteries with ventilation in order to not expose the TEXU400 to corrosive gases.
- The installation should take place on a non-flammable surface. Optionally, you can get a suitable mounting plate for separation: ▶ **tiger.jetzt/texu400**
- The TEXU400 complies with the **ISO8846 standard**. Therefore, it is ignition-protected against flammable gases and approved for mounting in the engine compartment. To comply with the standard, the front cover must be in place and securely locked with the central knob in order to achieve a tight seal between base and cover. Regardless of this, it should be noted that the **maximum ambient temperature should not exceed 50° C / 122° F** under any circumstances and that any electronics can experience cooling problems and thus performance losses as the temperature rises. If possible, all electrical components (including the TEXU400) should be installed **in well-ventilated, rather cool locations**.
- For mounting on the surface, there is one central and various radially arranged boltholes available in the base of the TEXU400. Start the assembly with the central screw in order to be able to rotate the TEXU400 for a more precise alignment of ports and cables. To connect the wiring, all **other bolts holes must also be used** to avoid possible damage to the baseplate.

5. WIRING

- Please **only use approved cables** with fine-wire stranded wire, such as automotive standard FLYR or FLY (see our cable range at ▶ **tiger.jetzt/cable**). Check regulations regarding cable choice for your application!
- Due to heat development, it is advisable **not to lay cables of high-current distributors in cable ducts**. Please run them openly and securely fastened.
- To connect the wiring, we recommend **closed, uninsulated tubular cable lugs of tinned quality**.
- After crimping, insulate with a suitable piece of shrink tubing (suitable diameter, approx. twice as long as the straight section of the cable sheathing to be covered up to the bend in the tubular cable lug). The shrink tubing must not cover the contact surfaces!
- When installing the cables on the TEXU400, note the torques stamped on the baseplate. The use of a **suitable torque wrench** is essential here.

bolt torque ratings (Nm/ft-lb)

M4	M5	M8	M10
1.5/1.1	5.4/4	12.5/9.5	24.5/18.1

- Connect the positive lines of the batteries to ports 3 - 6. Depending on the number of batteries used, the most powerful loads should follow directly (from port 4 when using a single battery). Ports 8 - 11 are intended for smaller consumers with MIDI fusing.

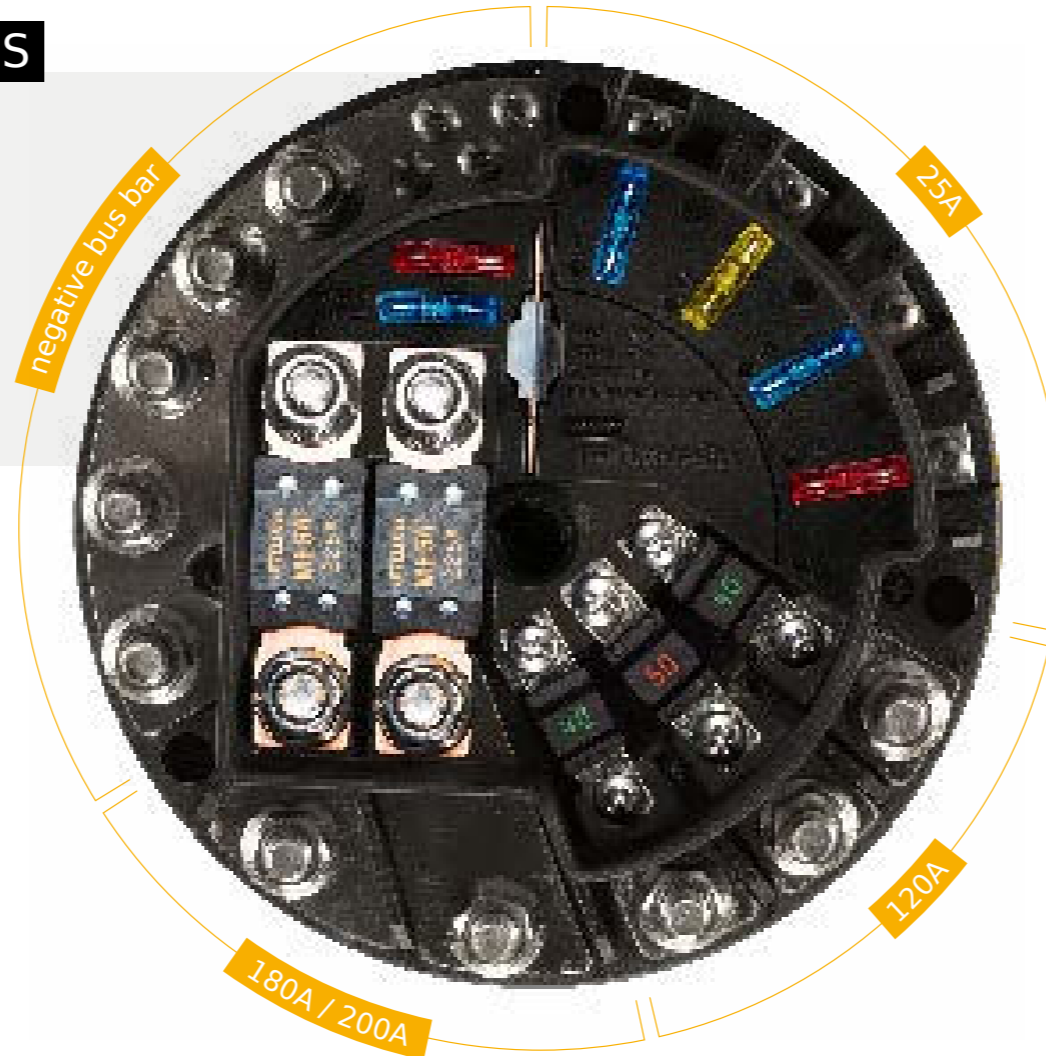
TECHNICAL SPECIFICATIONS & IMPORTANT INSTALLATION INSTRUCTIONS

The **TEXU200** is a high-current DC distributor for a total of 200A. Positive and negative bus bars for connecting one batterie / battery bank and loads are integrated. All individual circuits are protected by means of different fuses (not included!). Blown fuse monitoring is implemented for all connected loads.

TEXU200 is ignition-protected against flammable gases in accordance with ISO8846.

1. SAFETY WARNINGS

Working on electrical systems requires specialized knowledge and should only be carried out by **qualified personnel**. Please also observe the **battery safety instructions** listed in your battery manual.



2. TECHNICAL SPECIFICATIONS

All information on wiring gauges in this document relates to a **maximum ambient temperature of 50° Celsius / 122° Fahrenheit**. We therefore strongly recommend **not to route any cables within cable ducts**. The specified wiring gauges and their maximum current load refer to **open routing** of all cables

2.1 CIRCUIT PROTECTION

The positive bus bar of the TEXU200 integrates connections for **one battery or several batteries that have been merged**, as well as for **up to 4 high-current and four standard loads**. Every single circuit is fuseprotected.

! Maximum permissible total current:
200A at 35°C / 95° F and 180A at 50°C / 122° F.

Note the specifications in the following table:

Type of fuse	max. cable gauge	max. continuous current	max. current intermittent
MEGA-Fuse (Ports 1 und 2)	AWG 2/0 (70 mm ²)	180A	200A / max. 30 min
MIDI-Fuse (Ports 3 bis 5)	AWG 1/0 (50 mm ²)	120A	
ATO/ATP/ATC (Ports 6 bis 9)		25A	

All data given at a maximum ambient temperature of 50° Celsius / 122° Fahrenheit.



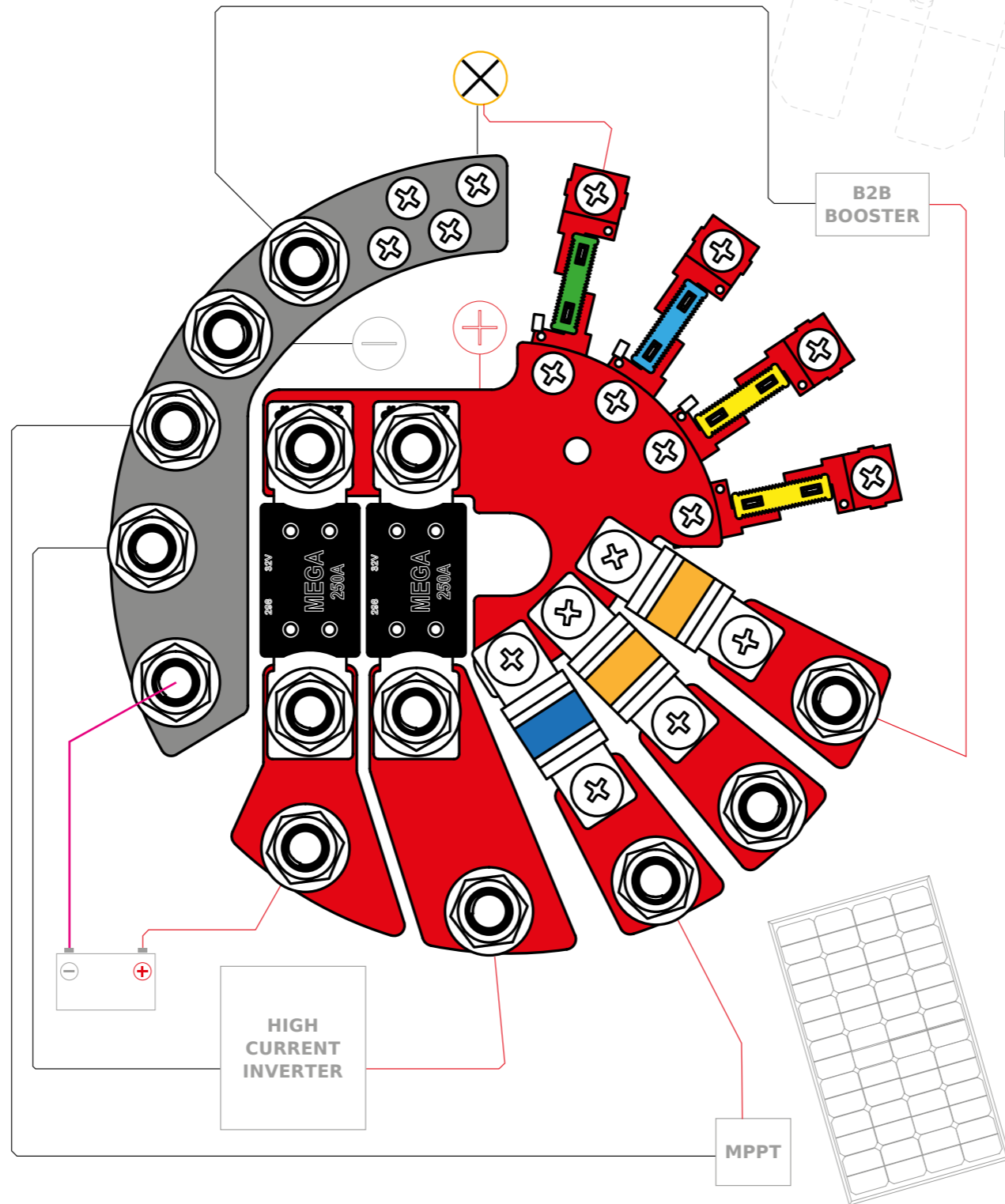
2.1.1 FUSING

On the positive bus bar there are fused ports to connect the battery / battery bank as well as loads. The TEXU200 holds space for **a total of 9 fuses**, one for each DC circuit.

The spaces are suitable for the installation of **MEGA, MIDI and ATO / ATC / ATP fuses**.

Always use fuses of correct voltage and amperage. Adjust the fuse ratings to the maximum voltages and currents that can potentially occur in the protected circuit, and remember that the load with the nominal amperage only allows short-term protection. Please refer to the data sheets of the fuse manufacturer and or the device in question regarding this.

Use **fuses with 32V for 12V and 24V systems** and **fuses with 58V for 48V systems**.



2.1.2 BLOWN FUSE MONITORING

Use the stickers included with the TEXU200 to **identify the circuits** and place them on the front cover.

The positive bus bar of the TEXU200 is equipped with **fuse monitoring** for each circuit. For connected loads, a blown fuse detection circuit shows tripped fuses via LED lighting, where the light is being routed through special light guides to the corresponding label on the cover to safely match the fuse in question and the corresponding label for easy identification even when the cover is closed.

Please note: The blown fuse monitoring **only shows defective fuses for connected loads**. The fusing of the batteries and any connected chargers is not indicated by the TEXU200!



Note: To enable the feature of blown fuse indication we intentionally allow a residual current parallel to the fuse. This current can potentially dimly light up very low power devices such as single LEDs within appliances or LED spots of all sorts even when fuse is blown or totally removed! Since this current is limited to around 1mA in 12V systems and around 5mA in 48V systems, this phenomenon does not pose any risk and is perfectly normal behavior.

2.2 BATTERY INPUT WIRING

The positive supply is fed in via one of the two MEGA fuses for one or more (external series or parallel connection) batteries.

At 180A (200A max. 30min) maximum current, the connection is made with at least 70mm², at 120A with at least 50mm².

All data relates to an ambient temperature of maximum 50°C / 122° Fahrenheit.

3. NEGATIVE BUS BAR

Each port on the positive bus bar has a corresponding bolt on the negative bus bar. The maximum wiring diameter to be used on the negative bus bar also corresponds to their respective counterparts in the positive side - AWG 2/0 (70 mm²) and AWG 1/0 (50 mm²). For diameters ≤AWG 2 (35 mm²), two cable lugs on a single bolt is permissible if needed, provided that this can be achieved in a mechanically sensible manner.



4. MOUNTING THE TEXU200

- Install in an environment **protected from moisture to avoid corrosion.**
- Choose the mounting location **as close as possible to the batteries** and high-current loads such as big inverters, winches or alike.
- Do not mount directly above lead-acid batteries with ventilation in order to not expose the TEXU200 to corrosive gases.
- The installation should take place on a non-flammable surface. Optionally, you can get a suitable mounting plate for separation:
▶ **tiger.jetzt/texu-family**
- The TEXU200 complies with the **ISO8846 standard.** Therefore, it is ignition-protected against flammable gases and approved for mounting in the engine compartment. To comply with the standard, the front cover must be in place and securely locked with the central knob in order to achieve a tight seal between base and cover. Regardless of this, it should be noted that the **maximum ambient temperature should not exceed 50° C / 122° F** under any circumstances and that any electronics can experience cooling problems and thus performance losses as the temperature rises. If possible, all electrical components (including the TEXU200) should be installed **in well-ventilated, rather cool locations.**
- For mounting on the surface, there is one central and various radially arranged boltholes available in the base of the TEXU200. Start the assembly with the central screw in order to be able to rotate the TEXU200 for a more precise alignment of ports and cables. To connect the wiring, all **other bolts holes must also be used** to avoid possible damage to the baseplate.

5. WIRING

- Please **only use approved cables** with fine-wire stranded wire, such as automotive standard FLYR or FLY (see our cable range at ▶ **tiger.jetzt/cable**). Check regulations regarding cable choice for your application!
- Due to heat development, it is advisable **not to lay cables of high-current distributors in cable ducts.** Please run them openly and securely fastened.
- To connect the wiring, we recommend **closed, uninsulated tubular cable lugs of tinned quality.**
- After crimping, insulate with a suitable piece of shrink tubing (suitable diameter, approx. twice as long as the straight section of the cable sheathing to be covered up to the bend in the tubular cable lug). The shrink tubing must not cover the contact surfaces!

- When installing the cables on the TEXU200, note the torques stamped on the baseplate. The use of a **suitable torque wrench** is essential here.
- Connect the positive line of the battery / battery bank to port 1. Then the plus cable of the strongest consumer with port 2 (MEGA fuse with max. 200A) and others with ports 3 - 5 with protection via MIDI fuses up to max. 120A. Ports 6 - 9 are intended for smaller consumers with ATO/ATP/ATC protection of max. 25A.

bolt torque ratings (Nm/ft-lb)

Ports 6-9	MIDI	Ports 1-5
M4	M5	M8
1,5/1,1	5,4/4	12,5/9,5



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