

Modul 800-CT8-LP
Strommessmodul für das REM 801

Installationsanleitung



Benutzerhandbuch:



English version: see rear side



Allgemeines

Haftungsausschluss
Die Beachtung der Nutzungsinformationen zu den Geräten, Modulen und Komponenten ist Voraussetzung für den sicheren Betrieb und um angegebene Leistungsmerkmale und Produktigenschaften zu erreichen.

Weiterführende Nutzungsinformationen, wie z. B. die Installationsanleitung oder das Benutzerhandbuch zum Basisgerät, finden Sie auf unserer Website.

Urheberrechtservermerk
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- Technische Änderungen vorbehalten
• Achten Sie darauf, dass Ihr Gerät, Modul oder Ihre Komponente mit der Installationsanleitung übereinstimmt.

während der gesamten Lebensdauer verfügbar halten und gegebenenfalls an nachfolgende Benutzer weitergeben.
Bei technischen Fragen wenden Sie sich bitte an:
• Tel.: +49(0)2772 505-9052
• E-Mail: info@rittal.de.

Entsorgung
Bitte beachten Sie nationale Bestimmungen! Entsorgen Sie gegebenenfalls einzelne Teile, je nach Beschaffenheit und existierende länderspezifische Vorschriften, z. B. als:
• Elektroschrott
• Batterien und Akkumulatoren
• Kunststoffe
• Metalle

Relevante Gesetze, angewendete Normen und Richtlinien
Die von der RITTAL GmbH & Co. KG angewendeten Gesetze, Normen und Richtlinien für das Gerät entnehmen Sie der Konformitätserklärung auf unserer Website.

INFORMATION

Unsere Nutzungsinformationen verwenden die nach der Gränzmak männliche Form im geschlechtsneutralen Sinn. Sie sprechen immer Frauen, Männer und Diverse an. Um Texte leichter lesbar zu halten, wird auf Unterscheidungen verzichtet. Wir bitten um Verständnis für diese Vereinfachungen.



Sicherheit

Sicherheitshinweise
Die Installationsanleitung stellt kein vollständiges Verzeichnis aller für den Betrieb des Geräts (Modul/Komponente) erforderlichen Sicherheitsmaßnahmen dar.

- Verwendete Symbole auf dem Gerät (Modul/Komponente):
- Das zusätzliche Symbol auf dem Gerät selbst deutet auf eine elektrische Gefahr hin, die zu schweren Verletzungen oder Tod führen kann.

- GEFAHR
Warnt vor einer unmittelbar drohenden Gefahr, die zu schweren bzw. tödlichen Verletzungen oder Tod führt.

- WARNUNG
Warnt vor einer möglicherweise gefährlichen Situation, die zu schweren Verletzungen oder Tod führen kann.

- VORSICHT
Warnt vor einer möglicherweise gefährlichen Situation, die zu geringfügigen oder mäßigen Verletzungen führen kann.

- ACHTUNG
Warnt vor einer unmittelbar gefährlichen Situation, die bei Nichtbeachtung zu Sachschäden oder Umweltschäden führen kann.

- INFORMATION
Verweist auf Vorgänge bei denen keine Gefahr von Personen- oder Sachschäden besteht.

Maßnahmen zur Sicherheit
Beim Betrieb elektrischer Geräte stehen zwangsläufig bestimmte Teile dieser Geräte und deren Komponenten unter gefährlicher Spannung.

WARNTUNG
Gefahr durch Nichtbeachtung von Warn- und Sicherheits Hinweisen! Die Nichtbeachtung von Warn- und Sicherheits Hinweisen auf dem Gerät selbst und in den Nutzungs Informationen kann zu Verletzungen bis hin zum Tod führen.

Qualifiziertes Personal
Um Personen- und Sachschäden zu vermeiden, darf nur qualifiziertes Personal mit elektrotechnischer Ausbildung am Basisgerät und dessen Komponenten arbeiten mit Kenntnissen

- Bestimmungsgemäße Verwendung
• sind nur für den Einsatz im Bereich der industriellen Steuerungen bestimmt.

- Eingangskontrolle
Der einwandfreie und sichere Betrieb der Geräte, Module und Komponenten setzen sachgemäßen Transport, fachgerechte Lagerung, Aufstellung und Montage sowie sorgfältige Bedienung und Instandhaltung voraus.

Es ist anzunehmen, dass ein gefahrloser Betrieb unmöglich ist, wenn das Basisgerät, das Modul oder die Komponente z. B.:
• sichtbare Beschädigungen aufweist.

- WARNUNG
Beschädigung des Geräts/Moduls oder Ihrer Anlage bis hin zu lebensgefährlichen Verletzungen durch Kurzschluss.



Geräte-Kurzbeschreibung

Das Strommessmodul
• erweitert den Funktionsumfang des Basisgeräts um weitere Strommesskanäle (2 Gruppen à 4 Strommesskanäle).



Modul 800-CT8-LP



Montage

Sach- oder Personenschaden durch Nichtbeachtung der Montagehinweise!
Nichtbeachtung der Montagehinweise kann Ihr Basisgerät mit Modul beschädigen oder zerstören und bis hin zu Personenschäden führen.

- INFORMATION
Systemgrenzen:
Die maximale Baseline (JanBus) für den Aufbau von Messgeräte- und Modul-Topologien entnehmen Sie den „Technischen Daten“.

Den Lieferumfang des Moduls 800-CT8-LP entnehmen Sie dem Benutzerhandbuch zum Modul.

3. Drücken Sie Ihr Modul mit Busverbinder auf die Hutschiene (geeignete Hutschiene-Typen siehe „Technische Daten“) bis die Bodenriegel einrasten (click).

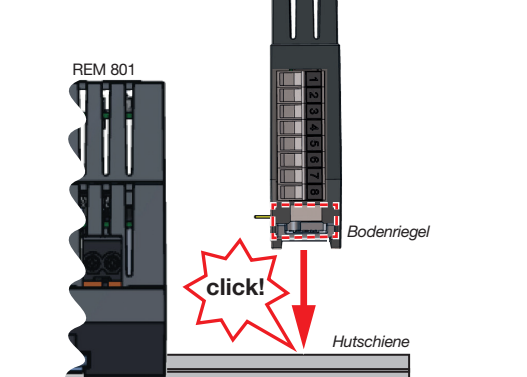


Abb.: Seitenansicht REM 801 und Modul 800-CT8-LP

4. Schieben Sie die Kontakte Ihres Modul-Busverbinders in die Buchsen des Basisgeräts-Busverbinders (oder in die Buchsen des angereihten Moduls), so dass die Busverbinder-Geräte gekoppelt sind.

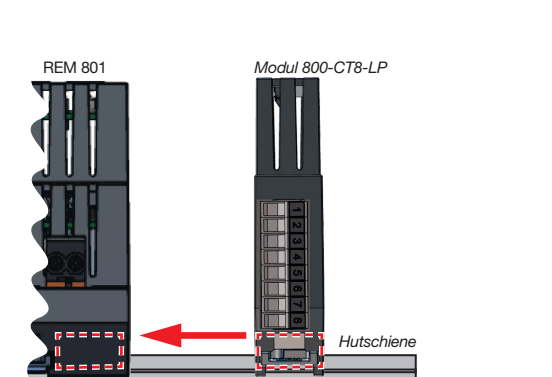


Abb.: Frontansicht REM 801 (Basisgerät) mit Modul 800-CT8-LP

5. Nach erfolgreicher Kopplung der Busverbinder (Geräte) verbinden Sie Ihr Modul und legen Spannung an das Basisgerät (Ihre Anlage) an.

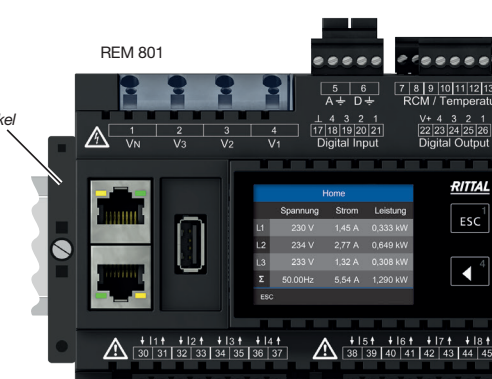


Abb.: Frontansicht REM 801 mit gekoppeltem Modul 800-CT8-LP



Kommunikation

Nach der Montage Ihres Moduls, kontrollieren Sie die funktionierende Kommunikation zwischen Basisgerät und Modul über die Anzeige des Basisgeräts, wie folgt:

- Wählen Sie mit den Tasten 2 (+) und 5 (-) in der Menüeintrag System-Informationen und bestätigen Sie mit Taste 3 Enter.

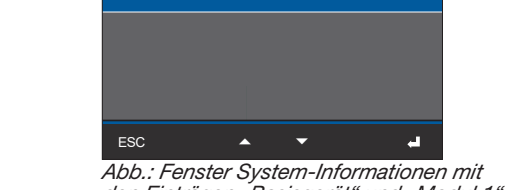


Abb.: Fenster System-Informationen mit den Einträgen „Basisgerät“ und „Modul 1“.

Das Basisgerät hat Modul 1 erkannt.

ACHTUNG

Das Basisgerät erkennt beim Startvorgang das Modul nicht! Bei fehlender Kommunikation zum Modul, erfolgt keine Unterstützung der Modul-Funktionen (Strommessungen).



Strommessung

Das Modul 800-CT8-LP
• misst Strom ausschließlich über Low-Power-Stromwandler.

- INFORMATION
• Prüfen Sie vor dem Koppeln des Moduls die Spannungsfreiheit Ihres Basisgeräts! Die Kopplung unter Spannung kann Ihr Basisgerät oder Modul zerstören!

- WARNUNG
Verletzungsgefahr durch große Ströme und hohe elektrische Spannungen! Schwere Körperverletzungen oder Tod können erfolgen, durch:

ACHTUNG
Falsch dimensionierte oder angeschlossene Stromwandler können zu Sachschäden führen! Vertauschte Stromwandlerklemmen (L1 und L7) oder falsch dimensionierte Stromwandler können zu falschen Messergebnissen und/oder zu falschem Regelverhalten führen!

- 2. Die Polung der Stromwandler kann modellbedingt abweichen! Beachten Sie außerdem die technischen Anschlussbedingungen und die Kennzeichnungen auf dem Typenschild Ihrer Stromwandler.



Anschlussbeispiel: Strommessung und Klemmenbelegung des Moduls 800-CT8-LP

Die Abbildung zeigt ein Anschlussbeispiel für z. B. die Strommessung über LP-Stromwandler an 4 von 8 LP-Strommesskanälen (Low power) des Moduls 800-CT8-LP.

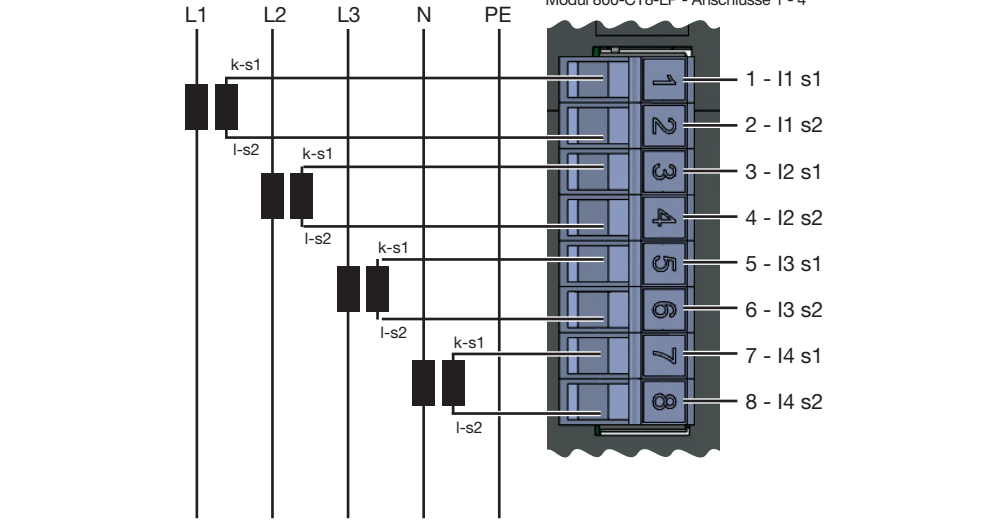


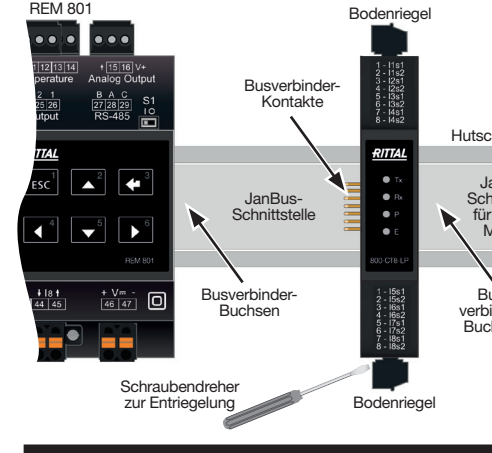
Abb.: Anschlussbeispiel - Strommessung über LP-Stromwandler (Sekundäre Nennspannung - siehe technische Daten)



Demontage

- Modul demontieren:
1. Anlage spannungsfrei schalten! Gegen Wiedereinschalten sichern! Spannungsfreiheit herstellen! Erden und Kurzschließen! Benachbarte, unter Spannung stehende Teile abdecken oder abschränken!

ACHTUNG
Zu grobe Handhabung kann Ihr Modul beschädigen und zum Sachschaden führen! Die Busverbinder-Kontakte und die Bodenriegel können bei der Demontage Ihres Moduls beschädigt oder abgebrochen werden.



ACHTUNG
Sachschaden durch Demontieren oder Entkoppeln des Moduls während des Betriebs! Demontieren oder Entkoppeln des Moduls während der Kommunikation mit dem Basisgerät kann zur Beschädigung Ihrer Geräte führen!



Technische Daten

Table with technical specifications for the module, including net weight, dimensions, and environmental conditions.

Table with technical specifications for the module, including measurement range, input impedance, and frequency response.

Table with technical specifications for the terminal block, including dimensions and material.

Table with technical specifications for the LED module, including data sending and receiving capabilities.

INFORMATION
• Ausführliche technische Daten des Moduls finden Sie im Benutzerhandbuch. Technische Daten zum Basisgerät und Informationen zur Vorgehensweise im Fehlerfall finden Sie in den Nutzungs Informationen Ihres Basisgeräts.

- LEDs Modul 800-CT8-LP
Tx (Daten senden): Blinken „orange“ im Betrieb und signalisieren zyklischen Datenaustausch.

RITTAL logo



Art. no. 808232  
www.rittal.com  
Doc. no. D-000-000336-08 02/2024

## 800-CT8-LP Module

Current measuring module for the REM 801

### Installation manual



User Manual:  


Deutsche Version: siehe Vorseite

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**RTITL**

### 1 General

**Disclaimer**  
Compliance with the usage information for the devices, modules and components is a prerequisite for safe operation and attaining the stated performance characteristics and product features. RTITL GmbH & Co. KG assumes no liability for bodily injury, material damage or financial losses which result from disregard of the usage information. Make sure that your usage information is readily available and legible.

Further usage information, such as the installation manual or the user manual for the basic device, can be found on our website.

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**Subject to technical alterations.**

- Make sure that your device, module or component matches the installation manual.
- First make sure you have read and understood the usage information accompanying the product.
- Keep the usage information associated with

the product available for the entire service life and pass it on to any possible subsequent users.

**For technical queries, please contact:**

- Phone: +49(0)2772 505-9052
- E-Mail: info@rittal.de

**For complaints or support, please contact:**

- Phone: +49(0)2772 505-1855
- E-Mail: service@rittal.de

**Disposal**  
Please abide by national regulations! Dispose of individual parts, as applicable, depending on their composition and existing country-specific regulations, e.g. as:

- Electronic waste
- Batteries and rechargeable batteries
- Plastics
- Metals

or engage a certified disposal company to handle scrapping.



**Relevant laws, applied standards and directives**  
Please refer to the Declaration of Conformity on our website for the laws, standards and directives applied by RTITL GmbH & Co. KG for the device.

### 2 INFORMATION

Our usage information uses the grammatical masculine form in a gender-neutral sense! This form always refers equally to women, men and diverse. In order to make the texts more readable, distinctions are not made. We ask for your understanding for these simplifications.

**SAFETY INFORMATION**  
The installation manual does not represent a complete set of all safety measures required for the operation of the device (module/component). Special operating conditions can require additional measures. The installation manual contains information which must be observed to ensure your personal safety and avoid material damage.

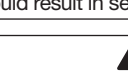

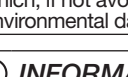
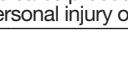
Symbols used on the device (module/component):

-  The additional symbol on the device itself indicates an electrical danger that can result in serious injuries or death.
-  This general warning symbol draws attention to a possible risk of injury. Be certain to observe all of the information listed under this symbol in order to avoid possible injury or even death.

### 3 Safety information

The installation manual does not represent a complete set of all safety measures required for the operation of the device (module/component). Special operating conditions can require additional measures. The installation manual contains information which must be observed to ensure your personal safety and avoid material damage.

Symbols used on the device (module/component):

-  **DANGER**  
Warns of an imminent danger which results in serious or fatal injury (death).
-  **WARNING**  
Warns of a potentially hazardous situation which could result in serious injury or death.
-  **CAUTION**  
Warns of a possibly hazardous situation which can result in minor or moderate injury.
-  **ATTENTION**  
Warns of an immediately hazardous situation which, if not avoided, can result in material or environmental damage.

**INFORMATION**  
Indicates procedures in which there is no hazard of personal injury or material damage.

### 4 Safety measures

When operating electric devices, it is unavoidable for certain parts of these devices and their components to conduct hazardous voltage. Consequently, severe bodily injury or material damage can occur if they are not handled properly.

- Before making connections to the device and its components, ground the device by means of the ground wire connection, if present.
- Hazardous voltages can be present in all circuitry parts that are connected to the power supply.
- There can still be hazardous voltages present in the device or the components even after disconnection from the supply voltage (capacitor storage).
- Do not exceed the limit values specified in the user manual and on the rating plate! This must also be observed during testing and commissioning!
- Observe the safety information and warning notices in the usage information associated with the device and its components!

**WARNING**  
**Hazard due to disregard of warning and safety information!**  
Disregard of the warnings and safety information on the device itself and in the usage information for the device and its components can lead to injuries or even death!  
Observe the safety information and warning notices on the device itself and in the usage information associated with the devices and their components, such as:  
- Installation manual.  
- Installation supplement.  
- User manual.  
- Supplement Safety Information.

### 5 Qualified personnel

To avoid bodily injury and material damage, only qualified personnel with electrical training are permitted to work on the basic device and its components who have knowledge of:

- The national accident prevention regulations.
- Safety technology standards.
- Installation, commissioning and operation of the device and the components.

**WARNING**  
**Risk of injury due to electric voltage or electric current!**  
When handling electric currents or voltages, serious bodily injury or death can result from:  
- Touching bare or stripped leads that are energized.  
- Device inputs that pose a hazard when touched.  
- Before starting work on your system:  
- Disconnect the supply of power to the system!  
- Secure it against being switched on!  
- Check to be sure it is de-energized!  
- Ground and short circuit!  
- Cover or block off adjacent live parts!

**Intended use**  
The modules/components

- Are intended only for use in the field of industrial controls.
- Are intended as expansion or transfer modules for the REM 801 basic device in switchboard cabinets and small distribution boards. Please observe the usage information associated with the basic device.
- Only mount with the basic device disconnected from the power supply (see "Mounting" step).
- Not intended for installation in vehicles! Use of the basic device with modules in non-stationary equipment is considered an exceptional environmental condition and is only permissible by special agreement.
- Not intended for installation in environments with harmful oils, acids, gases, vapors, dusts, radiation, etc.

### 6 Incoming goods inspection

The prerequisites for trouble-free and safe operation of the devices, modules and components include proper transport, storage, setup and assembly, as well as proper operation and maintenance.

- Was subjected to extended periods of unfavorable conditions (e.g. storage outside of the permissible climate thresholds without adjustment to the room climate, condensation, etc.) or transport stress (e.g. falling from an elevated position, even without visible external damage, etc.).

It can be assumed that safe operation is impossible if the basic device, module or component, for example:

- Has visible damage.
- No longer functions despite an intact power supply.
- Was subjected to extended periods of unfavorable conditions (e.g. storage outside of the permissible climate thresholds without adjustment to the room climate, condensation, etc.) or transport stress (e.g. falling from an elevated position, even without visible external damage, etc.).

If it can be assumed that safe operation is no longer possible, take your device, module or component out of operation immediately! Secure against unintentional startup.

### 7 Brief device description

The current measuring module

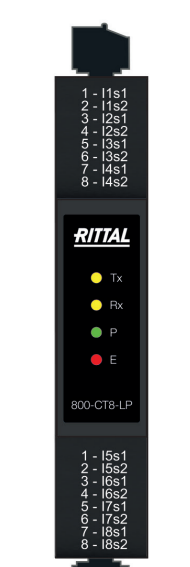
- extends the functional range of the basic device to include additional current measuring channels (2 groups of 4 current measuring channels each);
- is suitable for low-power current transformers (LP current transformers) with the transformer ratios of 0 - 400 mV.

The basic device (REM 801)

- allows the mounting of up to 10 current measuring modules of type 800-CT8-LP
- with current measuring module, measures current exclusively via current transformers. The LP current transformers require double insulation throughout in accordance with IEC 61010-1 to mains or measuring circuits.

**WARNING**  
**Damage to the device/module or your installation up to life-threatening injuries due to short circuit.**  
Insufficient insulation of the equipment (LP current transformers) at the current measurement inputs with respect to the mains circuits can lead to life-threatening voltages or damage to your device, module or installation.  
- Observe the data and specifications of your LP current transformer for insulation and ensure a continuous double insulation of your LP current transformers to mains and measuring circuits!

**INFORMATION**  
The scope of delivery for the module includes the appropriate bus connector (JanBus interface) for connection to the basic device or further modules.  
In addition to the current measuring module, also observe the usage information of your basic device and the LP current transformers!  
Do not extend the connecting leads of the LP current transformers at the current measurement inputs of the device/module! Extended measuring leads can affect the measuring result!



800-CT8-LP module

### 8 Mounting

**WARNING**  
**Disregard of the installation instructions may cause property damage or personal injury!**  
Disregard of the installation instructions may cause damage to your basic device with module or destroy it and/or may also result in personal injury!  
Only operate the REM 801 basic device belonging to the 800-CT8-LP module with a supply voltage of 24 V! Observe the technical specifications in the usage information of your basic device.

**WARNING**  
**Disregard of the installation instructions may cause property damage or personal injury!**  
Non-observance of the installation instructions may cause damage to your basic device with module or destroy it and/or may also result in personal injury.  
In addition to the installation instructions for your module, also observe the installation instructions for your basic device, in particular the safety information and warning notices.  
Before installing modules

- Disconnect the supply of power to the system!
- Secure it against being switched on!
- Check to be sure it is de-energized!
- Ground and short circuit!
- Cover or block off adjacent live parts!

Provide adequate air circulation in your installation environment and cooling, as needed, when the ambient temperatures are high.  
Return defective modules to RTITL GmbH & Co. KG in accordance with the shipping instructions for air or road freight (complete with accessories). All usage information is also available at our website.

**INFORMATION**  
System limits:  
- The maximum bus length (JanBus) for the setup of measurement device and module topologies can be found in the "Technical data".  
- If necessary, observe the installation manual for transfer modules when setting up decentralized measuring concepts.  
- Before mounting, please check the number of suitable modules for your measurement device and module topology based on the respective usage information.

For the scope of delivery of the 800-CT8-LP module, refer to the user manual for the module. More information on certain functions of the basic device with modules can be found in the usage information of the basic device.

Observe the installation instructions for your basic device (e.g. check bus connector installation!) and mount the 800-CT8-A module with the system de-energized as follows:

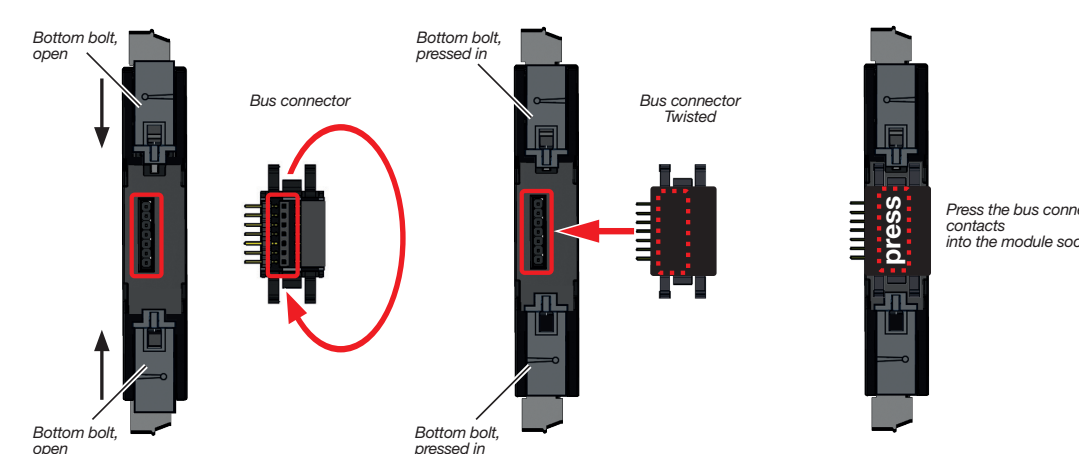


Fig.: Module rear views

- Press in the open bottom bolts on the rear of the module.
- If this has not yet been done, press the bus connector (JanBus interface) included in the scope of delivery into the sockets on the rear of your module.

### 9 Side view of the REM 801 and 800-CT8-LP module

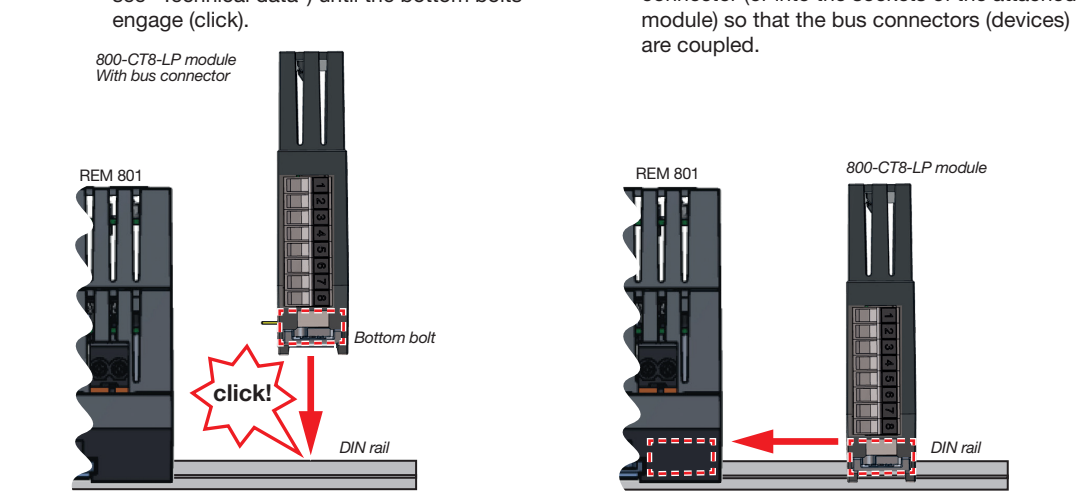


Fig.: Side view of the REM 801 and 800-CT8-LP module

**INFORMATION**  
Before coupling the module, check to be certain your basic device is de-energized! Coupling while energized can destroy your basic device or module!  
The basic device automatically recognizes the module during the power-up procedure!

### 10 Mounting example: Front view of the REM 801 (basic device) with 800-CT8-LP module

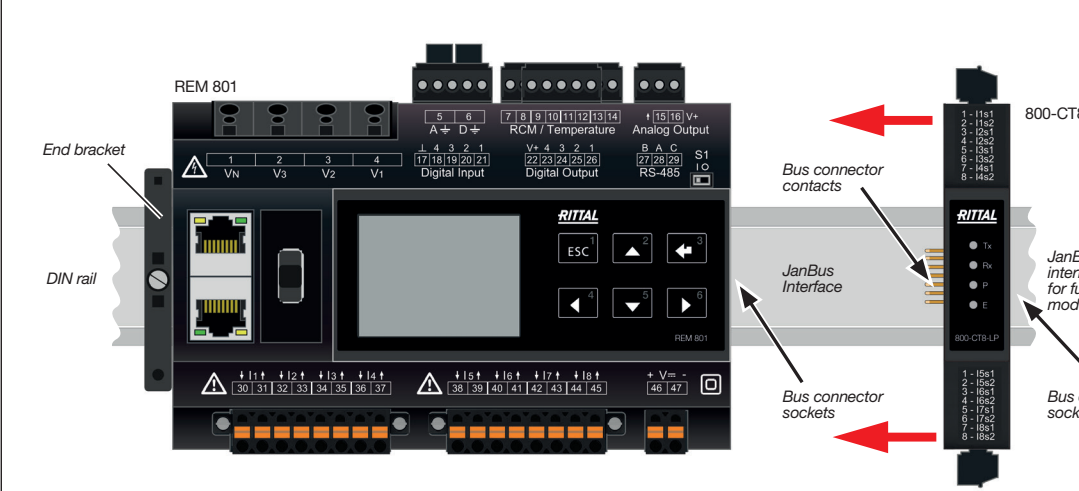


Fig.: Mounting example: Front view of the REM 801 (basic device) with 800-CT8-LP module

### 11 Front view of the REM 801 with coupled 800-CT8-LP module

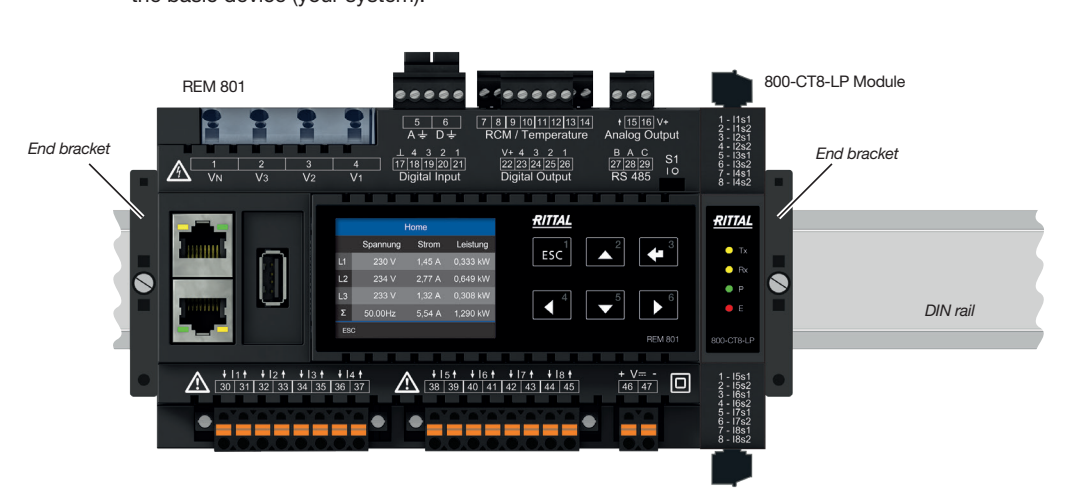


Fig.: Front view of the REM 801 with coupled 800-CT8-LP module

**INFORMATION**  
The figure shows a mounting example of the 800-CT8-LP module. The basic device allows the installation of up to 10 modules of the type 800-CT8-LP. Always start and end the installation of your measurement device and module series on the DIN rail with end brackets!

### 12 ATTENTION

Improper handling or handling them too roughly can destroy your devices, modules and bus connectors!  
Contacts, bottom bolts and retaining brackets can be damaged or broken off during mounting/dismounting.  
Never touch or manipulate contacts!  
Protect contacts during handling, transport and storage!  
Never use force to mount/dismount devices/modules/bus connectors! Never force bus connector contacts into the bus connector sockets!

**INFORMATION**  
Please note the following for the setup and dimensioning of your measurement and module topology:  
- The REM 801 basic device has 2x4 current measuring channels and allows current measurement in the mA range via the multifunction channels (only with suitable current transformers).  
- 1 module of the type 800-CT8-LP has 8 current measuring channels with current measurements exclusively via low-power current transformers (0 - 400 mV).  
- Use end brackets to set up your measurement device and module series on the DIN rails.

### 13 Communication

After installing your module, check the function of the communication between the basic device and the module using the display on the basic device as follows:

- When you are in the Home measuring display of the basic device, pressing the button "ESC" takes you to the Menu window.
- Use buttons 2 (+) and 5 (-) to select the menu item System information and confirm with button 3 Enter.
- The System information window with the items Basic device and Module 1 appears.

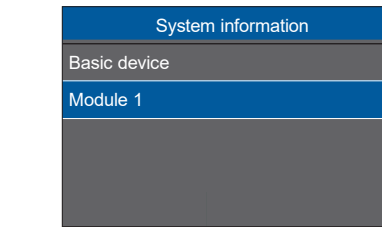


Fig.: System information window with the items "Basic device" and "Module 1".

The basic device has detected module 1.

**ATTENTION**  
The basic device does not recognize the module during the power-up procedure!  
If there is no communication to the module, the module functions are not supported (e.g. current measurements).  
Disconnect your system from the power supply and check the situation of the bus connectors and the connection of your module to the basic device (JanBus interface). If necessary, push the contacts of the module bus connector into the sockets of the basic device bus connector (or the attached modules) so that the bus connectors (devices) are coupled.  
If necessary, restart the basic device.  
If these measures do not lead to the desired result, please contact our Service Team - service@rittal.de.

### 14 Current measurement

The 800-CT8-LP module

- Measures current exclusively via low-power current transformers.
- Allows the connection of LP current transformers with a secondary voltage of 0 ... 400 mV.
- Does not measure DC currents.

**INFORMATION**  
You configure the LP current transformer ratios via the measuring device display of the basic device, the measuring device homepage of the basic device

**WARNING**  
**Risk of injury due to high currents and high electrical voltages!**  
Severe bodily injury or death can result from:  
- Touching bare or stripped leads that are energized.  
- Inputs of devices, components and modules are dangerous to touch.  
Therefore, please note for your system:  
- Disconnect the supply of power before starting work!  
- Secure it against being switched on!  
- Check to be sure it is de-energized!  
- Ground and short circuit! Use the ground connection points with the ground symbol for grounding!  
- Cover or block off adjacent live parts!

**ATTENTION**  
**Incorrectly dimensioned or connected current transformers can cause material damage!**  
Reversed current transformer terminals ("K" and "I") or incorrectly dimensioned current transformers can lead to incorrect measurement results and/or incorrect control performance!  
When connecting a current transformer, it is essential to observe the markings on the transformer!  
The polarity of the current transformers and thus the "energy flow direction" runs from "K" to "I"! The polarity of the current transformers may differ depending on the model!  
Also observe the technical connection requirements and the markings on the rating plate of your current transformers.

### 15 Connection example: Current measurement and terminal assignment of the 800-CT8-LP module

The figure shows a connection example for e.g. current measurement via LP current transformer on a set of 8 LP current measuring channels (low power) of the 800-CT8-LP module.

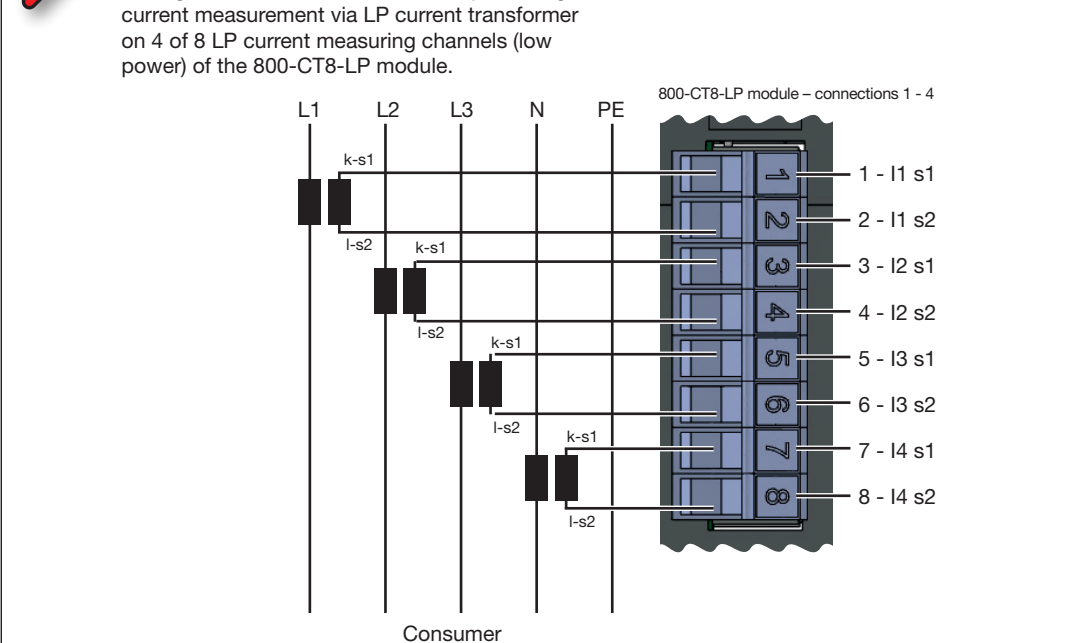
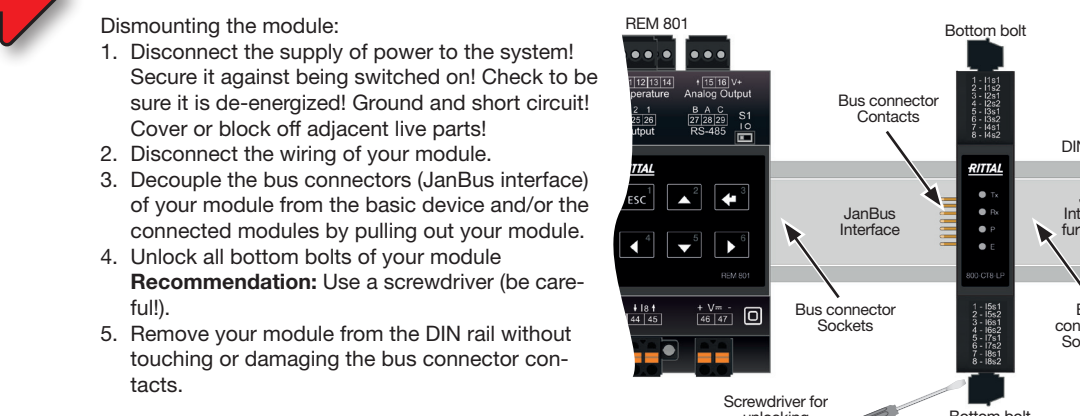


Fig.: Connection example - current measurement via LP current transformer (secondary rated voltage - see technical data).

### 16 Dismounting

Dismounting the module:

- Disconnect the supply of power to the system! Secure it against being switched on! Check to be sure it is de-energized! Ground and short circuit! Cover or block off adjacent live parts!
- Disconnect the wiring of your module.
- Decouple the bus connectors (JanBus interface) of your module from the basic device and/or the connected modules by pulling out your module.
- Unlock all bottom bolts of your module  
**Recommendation:** Use a screwdriver (be careful).
- Remove your module from the DIN rail without touching or damaging the bus connector contacts.



**ATTENTION**  
Handling your module too roughly may cause damage to the module and result in material damage!  
The bus connector contacts and the bottom bolts can be damaged or broken off when dismounting your module.  
Never pull the module out of the DIN rail forcefully.  
First decouple the bus connectors (JanBus interface) and carefully unlock the bottom bolts of the module with a screwdriver!

**ATTENTION**  
Material damage due to disassembly or decoupling of the module during operation!  
Dismounting or decoupling the module during communication with the basic device can cause damage to your devices!  
Disconnect your system from the power supply prior to dismounting or disconnecting the module! Secure it against being switched back on! Check to be sure it is de-energized! Ground and short circuit! Cover or block off adjacent live parts!

### 17 Technical data

General	
Net weight (with DIN terminals)	73 g (0.16 lb)
Device dimensions	W = 18 mm (0.71 in), H = 90 mm (3.54 in), D = 75 mm (2.95 in)
Mounting orientation	As desired
Fastening/mounting	TS 35/7.5 according to EN 60715
Suitable DIN rails	TS 35/15 x 1.5
Protection level	IP20 according to EN60529
Impact resistance	IK07 according to IEC 62262
Transport and storage	
Free fall	1 m (39.37 in)
Temperature	-25 °C (-13 °F) to +70 °C (158 °F)
Relative humidity	0 to 95% at 25 °C (77 °F), no condensation
Environmental conditions during operation	
The device:	For weather-protected and stationary use.
	Fulfills the operating conditions according to DIN IEC 60721-3-3.
	Has protection class II according to IEC 60336 VDE 0106, part 1. Is ground wire connection not required!
Working temperature	-10 °C (14 °F) to +55 °C (131 °F)
Relative humidity	5 to 95 % at 25 °C (77 °F), no condensation
Pollution degree	2
Ventilation	No forced ventilation required
Supply voltage	Through the REM 801 basic device
Module 800-CT8-LP current measurement	
Measurement via low-power current transformers with a secondary voltage of	0 - 400 mV
Channels	8 (2x4)
Wire end ferrules with collar * according to DIN 46 228/4, (min. - max.)	0.25 mm <sup>2</sup> - 1 mm <sup>2</sup> , AWG 22-17
Wire end ferrules without collar * according to DIN 46 228/4, (min. - max.)	0.25 mm <sup>2</sup> - 1.5 mm <sup>2</sup> , AWG 22-16
Nominal input signal of the module	0 - 400 mV
Overload for 1 s	1 V
Resolution	16 bit
Sampling frequency	0.8 kHz
Frequency of the fundamental oscillation	40 Hz - 70 Hz
Harmonics	1 ... 15 (odd only)
Interface and energy supply	
JanBus (proprietary)	Via bus connector
P (power - power supply)	Max. bus length (JanBus) 100 m
E (error - initialization and malfunction)	24 V

### 18 LEDS Modul 800-CT8-LP

Flash "orange" during operation and indicate cyclic data exchange.  
Lights up "green" when the power supply via the JanBus interface is correct.  
Lights up "red" when initializing/starting the device and in the event of a fault.

**INFORMATION**  
Detailed technical data on the module can be found in the user manual. Technical data on the basic device and information on how to proceed in the event of a fault can be found in the usage information of your basic device.