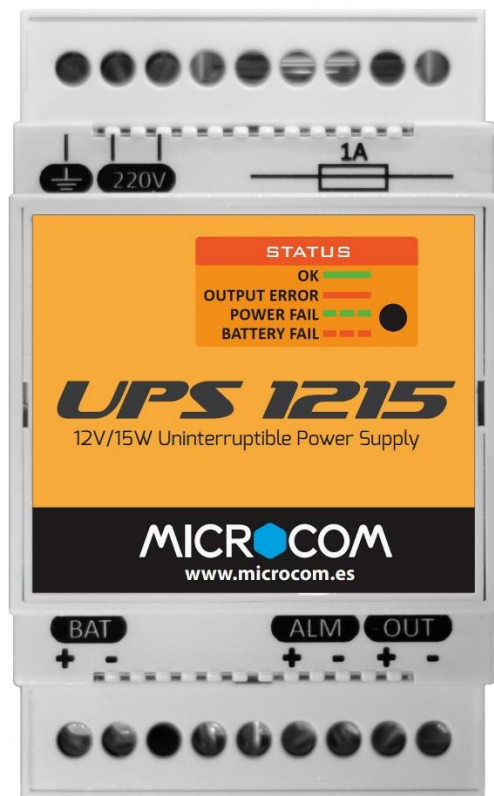


# MICROCOM

Simply More



## **UPS 1215      UPS 2415**

15W uninterruptible power supply

[Installation and operation manual](#)

*"Perfection is achieved, not when there is nothing more to add,  
but when there is nothing left to take away."  
- Antoine de Saint-Exupéry*

### Warning

1. This system has been developed to be installed by qualified personnel, not final users. If you have any queries regarding technical aspects, please contact our experts.
2. Our efforts to innovate in the development of software and hardware are continuous. Despite paying close attention to documenting our products properly, discrepancies may occur between a product and some of its specifications. If you have any queries or comments in this regard, please contact us by email at [microcom@microcom.es](mailto:microcom@microcom.es).
3. Life-support systems: This unit is not designed to be used in systems on which human life depends. That is, in devices whose malfunction could endanger human life.
4. Our liability in connection with the device shall be limited to its repair or replacement in accordance with the terms of the warranty.

All rights reserved. No part of this documentation may be reproduced, stored in a retrieval system or transmitted by any means (electronic, mechanical, photocopy, recording or any other means) without the prior written permission of Microcom Sistemas Modulares, S.L.

Notwithstanding the precautions taken in the drafting of this documentation, errors or omissions can still occur, for which the publisher and author assume no liability. Equally, they assume no liability for any damage resulting from the use of the information contained in this document. The information contained in this document is subject to change without notice and does not represent a commitment by Microcom Sistemas Modulares, S.L.

© 2003-2019 Microcom Sistemas Modulares, S.L. All rights reserved.

Microcom Sistemas Modulares, S.L.  
C/Gorostiaga, 53 • Irún • GUIPÚZCOA 20305  
Phone: 902 82 06 84 • 943 63 97 24  
Fax: 943 017 800  
[www.microcom.es](http://www.microcom.es)

## 1 General characteristics


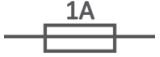
The UPS 1215 and UPS 2415 uninterruptible power supplies provide a fixed output voltage of 12 and 24 volts respectively in direct current and at a maximum power of 15 watts. The devices come in robust boxes ready for mounting on a 35 mm DIN rail.

Switching to the 12-volt lead gel battery upon detection of a cut in mains voltage is automatic and activates a digital output to warn of this event. This digital output can be used in conjunction with our Hermes remote control system to report mains power failure at a remote station.

Notable among its features is its microprocessor control. The functions of this control include protection against short circuits and continuous monitoring of the battery voltage to prevent battery overdischarge. Battery charging is performed by the 'float charging' method, which guarantees a long battery life.

This power supply incorporates a synchronous switched regulator of maximum efficiency and reliability that performs several functions: it increases battery voltage from 12 to 24 volts in the UPS 2415, provides a stable output voltage and limits the output current.

## 2 Terminal designation

Terminal	Signal
	GND. Earth connection
220V	Mains input
220V	Mains input
	Power input protection fuse. (1 ampere)
BAT+	Positive battery terminal
BAT -	Negative battery terminal
ALM+	Main power supply failure alarm. 12/24 Vdc voltage output
ALM -	Main power supply failure alarm. Open collector output
OUT+	12/24 V uninterruptible output
OUT -	0V output

### 3 Start-up





The UPS 1215 and UPS 2415 immediately start when they are connected to the mains or battery. The device continuously monitors the input and output voltage, and the condition of the lead acid battery. The two-colour LED will indicate the device's current operating mode.

### 4 Two-colour status LED interpretation

The two-colour LED will indicate the device's current operating mode.



Two-colour status LED

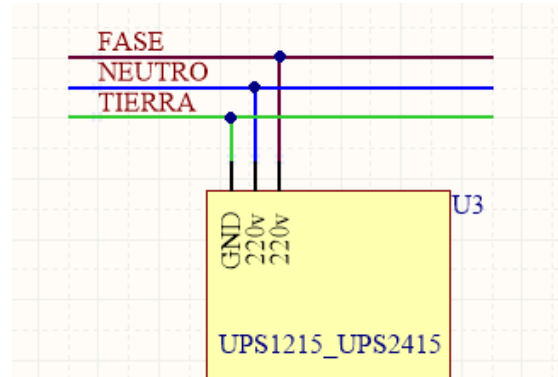
	Voltage output	Alarm activated	Description
OK 	Yes	No	Correct operation
OUTPUT ERROR 	No	No	Short circuit at the voltage output. Possible causes: <ul style="list-style-type: none"> <li>• One of the connected devices is causing a short circuit</li> <li>• The devices connected to the voltage output are consuming more than 15 watts</li> </ul>
POWER FAIL 	Yes	Yes	Fuse or main power failure. Possible causes: <ul style="list-style-type: none"> <li>• Main power cut</li> <li>• Fuse F1 is damaged. Check and replace.</li> </ul>
BATTERY FAIL 	Yes	No	Battery absence or failure. Possible causes: <ul style="list-style-type: none"> <li>• No battery connected</li> <li>• The battery connected is overdischarged and has a voltage of less than 10.1 volts</li> </ul>
OFF / ULTRA LOW POWER	No	No	Off or battery overdischarged. Possible causes: <ul style="list-style-type: none"> <li>• See causes associated with POWER FAIL and BATTERY FAIL operating modes</li> </ul>

## 5 Connection diagrams

### 5.1 Main power

Input voltage ranges 85 ~ 264 Vac and frequencies between 47 ~ 65 Hz.

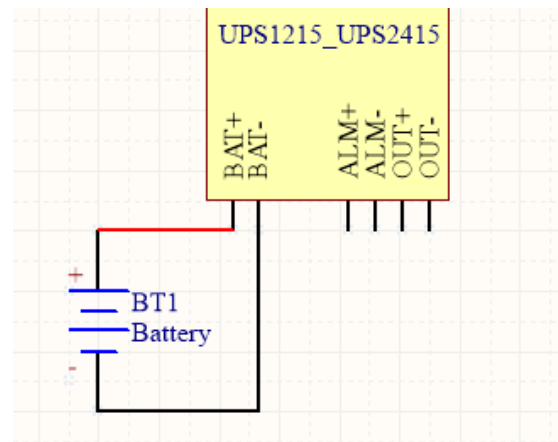
The main power is connected to the UPS through terminals [GND] [220v] [220v]



### 5.2 Lead acid battery

The UPS requires a 12-volt external lead acid battery with a capacity between 1.2 and 9 Ah for full operation.

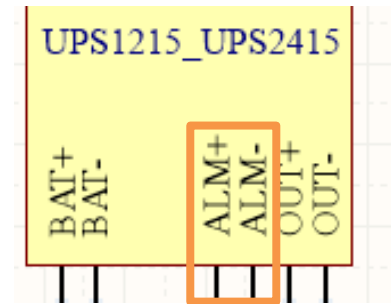
The battery is connected to the UPS through the [BAT +] [BAT -] terminals.



### 5.3 Main power supply failure alarm

The UPS is equipped with two digital outputs that switch automatically when a main power supply failure is detected.

- Terminal [ALM -] is an open collector
- Terminal [ALM +] is a voltage output. In the UPS 1215, the voltage is 12 Vdc and, in the UPS 2415, it is 24 Vdc

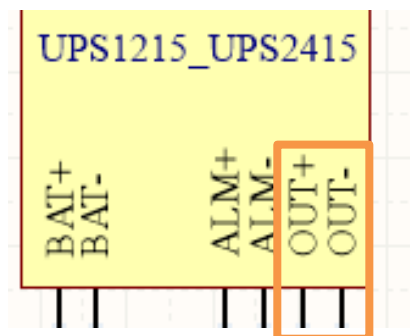


### 5.4 Uninterruptible output voltage

The voltage at this output depends on the UPS model. In the UPS 1215, the voltage is 12 volts and, in the UPS 2415, it is 24 volts.

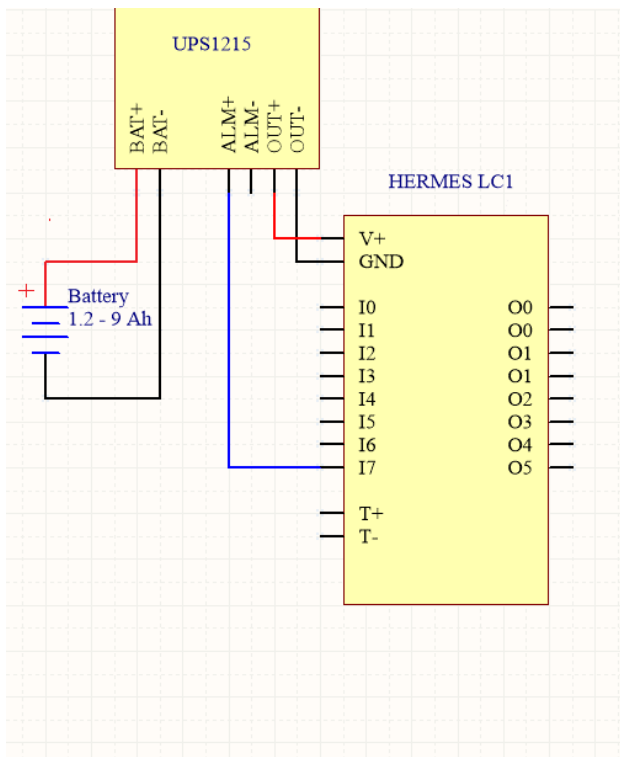
The following table shows compatibility with Hermes devices

	LC1	M100	M102	TCR-200
UPS 1215	Yes	Yes	Yes	Yes
UPS 2415	No	Yes	Yes	Yes

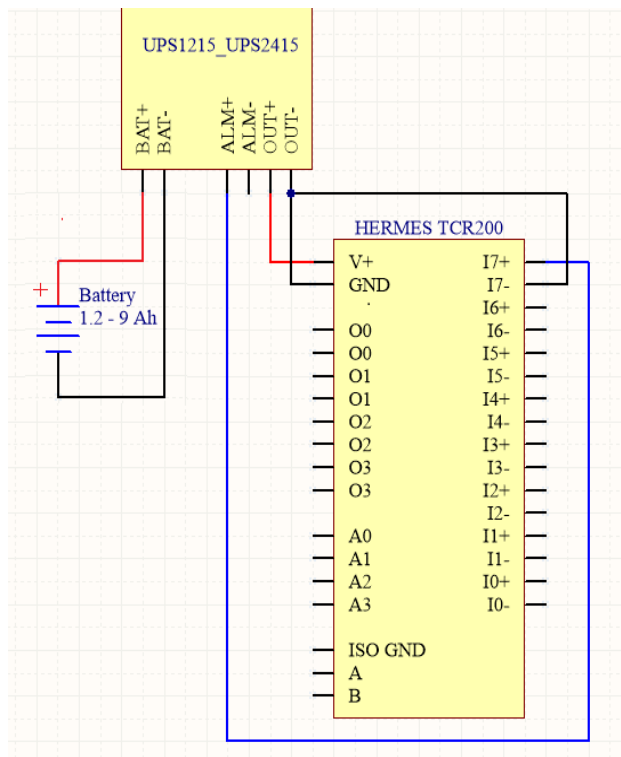


## 6 Example of connection to Hermes devices

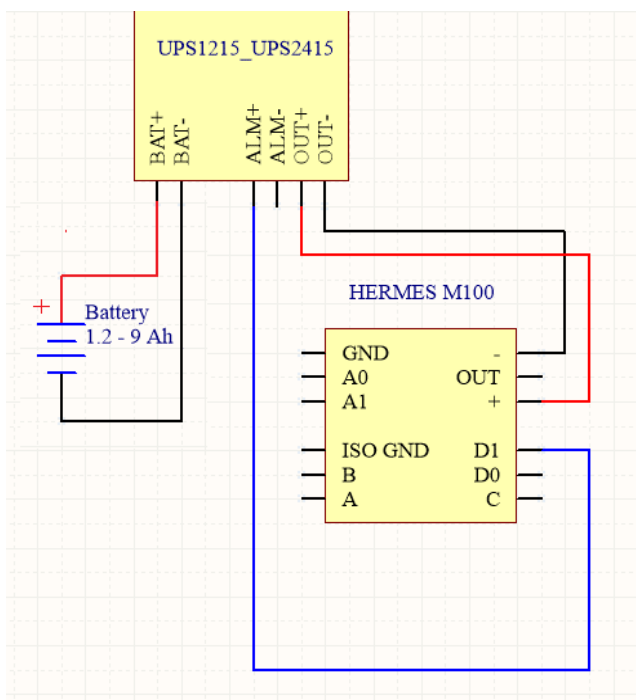
*HERMES LC1 (UPS 1215 ONLY)*



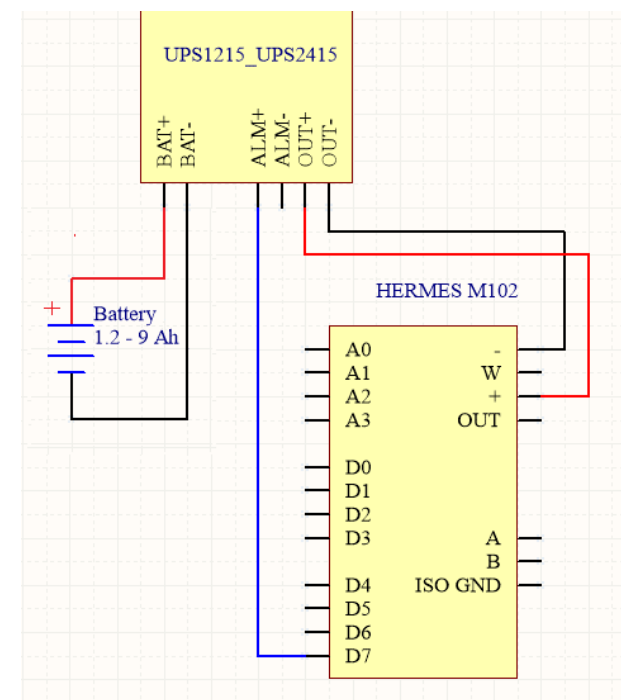
*HERMES TCR200 & TCR200+*



*HERMES M100*



*HERMES M102*



## 7 Technical specifications

### GENERAL

Input voltage range	85 ~ 264 Vac / 47 ~ 65 Hz
Protection functions	<ul style="list-style-type: none"><li>- Overvoltage and overcurrent at the power input</li><li>- Overvoltage and overcurrent at the voltage output</li><li>- Overdischarge of the lead acid battery</li></ul>
Mounting type	Mounting on 35 mm DIN rail
Dimensions	90 x 53 x 58 mm
Exterior materials	Polycarbonate: UL94-V0

### VOLTAGE OUTPUT

Voltage	UPS 1215	12 Vdc
	UPS 2415	24 Vdc
Rated power	15 W	

### BATTERY CHARGER

Technology	Float charging at 13.8 V / 250 mA.
Compatible battery	12V / 1.2~9 Ah lead acid battery

### MAIN POWER SUPPLY FAILURE OUTPUT

ALM +	Type: Digital voltage output
	- Maximum output voltage: 12 / 24 Vdc
	- Maximum current: 10 mA
ALM -	Type: Open collector
	- Maximum input voltage: 30 Vdc
	- Maximum current: 10 mA

## 8 Warranty

1. MICROCOM guarantees that this product is free from defects in materials and workmanship for three years. MICROCOM's sole obligation under this warranty is to repair or replace without charge any device part whose materials or workmanship are deemed to be faulty after an examination has been performed by MICROCOM, and only under the conditions listed below:

a) MICROCOM has been informed of the fault in writing within three years of the date of purchase of the device.

b) The device has not been maintained, repaired or altered by any person who has not been previously approved or authorised by MICROCOM.


c) The device has been used properly and normally, and has not been altered or misused, broken by accident or damaged by an act of God or other similar catastrophic incident.

d) The purchaser, either the DISTRIBUTOR or the DISTRIBUTOR's customer, packs and sends, or delivers, the device to MICROCOM's factory in Irún, Spain, within a maximum of 30 days after MICROCOM receives written notification of the fault. The cost of sending the device to MICROCOM shall be borne by MICROCOM if sent from within Spanish territory.

e) MICROCOM's liability is limited to repairing or replacing any of the device's parts without charge, provided that the examination performed by MICROCOM reveals that the part is faulty due to a defect in materials or workmanship.

1.1. The DISTRIBUTOR or the DISTRIBUTOR's customers may send the device directly to MICROCOM if the DISTRIBUTOR is unable to repair the device, even if it has been approved to do so, and the DISTRIBUTOR has agreed with the customer to have the repairs performed as covered by this limited warranty.

1.2. In the event that a product needs to be returned to MICROCOM for repair under the warranty, the DISTRIBUTOR must contact MICROCOM prior to sending in order to receive a Return Materials Authorisation number (RMA).

	<p>Disposal of waste electrical and electronic equipment (applicable in the European Union and other countries with separate collection). This symbol on the product or on its packaging indicates that this product must not be disposed of with other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.</p>
---	--