

## Operating Instructions

### USB Charger

Item no: 3402154 (UC-1C1A20W01) / 20 W  
 Item no: 3402155 (UC-1C1A25W01) / 25 W  
 Item no: 3402409 (UC-1C1A30W01) / 30 W  
 Item no: 3401961 (UC-45W001) / 45W  
 Item no: 3402158 (UC-65W001) / 65W



### 1 Operating Instructions for download

Use the link [www.conrad.com/downloads](http://www.conrad.com/downloads) (alternatively scan the QR code) to download the complete operating instructions (or new/current versions if available). Follow the instructions on the web page.

### 2 Intended use

The product is a USB GaN charger.

The product is intended for indoor use only. Do not use it outdoors.

Contact with moisture must be avoided under all circumstances.

If you use the product for purposes other than those described, the product may be damaged.

Improper use can result in short circuits, fires, electric shocks or other hazards.

The product complies with the statutory national and European requirements.

For safety and approval purposes, you must not rebuild and/or modify the product.

Read the operating instructions carefully and store them in a safe place. Make this product available to third parties only together with the operating instructions.

All company names and product names are trademarks of their respective owners. All rights reserved.

USB4®, USB Type-C® and USB-C® are registered trademarks of USB Implementers Forum.

### 3 Delivery contents

- Product
- Operating instructions

### 4 Description of symbols

The following symbols are on the product/appliance or are used in the text:



The symbol warns of hazards that can lead to personal injury.



The symbol warns of dangerous voltage that can lead to personal injury by electric shock.



This product must only be used in dry, enclosed indoor areas. It must not become damp or wet.



Protection class 2 (double or reinforced insulation, protective insulation).

### 5 Safety instructions



**Read the operating instructions carefully and especially observe the safety information. If you do not follow the safety instructions and information on proper handling, we assume no liability for any resulting personal injury or damage to property. Such cases will invalidate the warranty/guarantee.**

#### 5.1 General

- The product is not a toy. Keep it out of the reach of children and pets.
- Do not leave packaging material lying around carelessly. This may become dangerous playing material for children.
- If you have questions which remain unanswered by this information product, contact our technical support service or other technical personnel.
- Maintenance, modifications and repairs must only be completed by a technician or an authorised repair centre.

#### 5.2 Handling

- Handle the product carefully. Jolts, impacts or a fall even from a low height can damage the product.

#### 5.3 Operating environment

- Do not place the product under any mechanical stress.
- Protect the appliance from extreme temperatures, strong jolts, flammable gases, steam and solvents.
- Protect the product from high humidity and moisture.
- Protect the product from direct sunlight.
- Do not switch the product on after it has been taken from a cold to a warm environment. The condensation that forms might destroy the product. Allow the product to reach room temperature before you use it.

#### 5.4 Operation

- Consult an expert when in doubt about the operation, safety or connection of the product.
- If it is no longer possible to operate the product safely, take it out of operation and protect it from any accidental use. DO NOT attempt to repair the product yourself. Safe operation can no longer be guaranteed if the product:
  - is visibly damaged,
  - is no longer working properly,
  - has been stored for extended periods in poor ambient conditions or

- has been subjected to any serious transport-related stresses.

### 5.5 Power adapter



Do not modify or repair mains supply components including mains plugs, mains cables, and power supplies. Do not use damaged components. Risk of death by electric shock!

- Connect the appliance to a wall socket that can be accessed easily.
- Only connect the power adaptor to a normal mains socket connected to the public supply. Before plugging in the power adaptor, check whether the voltage stated on the power adaptor complies with the voltage of your electricity supplier.
- Never connect or disconnect power adaptors if your hands are wet.
- Never unplug the power adaptor from the mains socket by pulling on the cable; always use the grips on the plug.
- For safety reasons, disconnect the power adaptor from the mains socket during storms.
- Do not touch the power adapter if there are any signs of damage, as this may cause a fatal electric shock! Take the following steps:
  - Switch off the mains voltage to the socket containing the power adapter (switch off the corresponding circuit breaker or remove the safety fuse, and then switch off the corresponding RCD protective switch).
  - Unplug the power adapter from the mains socket.
  - Use a new power adapter of the same design. Do not use the damaged adapter again.

### 5.6 Connected devices

- Also observe the safety and operating instructions of any other devices which are connected to the product.

### 6 Cleaning and care

#### Important:

- Do not use aggressive cleaning agents, rubbing alcohol or other chemical solutions. They damage the housing and can cause the product to malfunction.
- Do not immerse the product in water.

1. Disconnect the product from the power supply.
2. Clean the product with a dry, fibre-free cloth.

### 7 Disposal



This symbol must appear on any electrical and electronic equipment placed on the EU market. This symbol indicates that this device should not be disposed of as unsorted municipal waste at the end of its service life.

Owners of WEEE (Waste from Electrical and Electronic Equipment) shall dispose of it separately from unsorted municipal waste. Spent batteries and accumulators, which are not enclosed by the WEEE, as well as lamps that can be removed from the WEEE in a non-destructive manner, must be removed by end users from the WEEE in a non-destructive manner before it is handed over to a collection point.

Distributors of electrical and electronic equipment are legally obliged to provide free take-back of waste. Conrad provides the following return options **free of charge** (more details on our website):

- in our Conrad offices
- at the Conrad collection points
- at the collection points of public waste management authorities or the collection points set up by manufacturers or distributors within the meaning of the ElektroG

End users are responsible for deleting personal data from the WEEE to be disposed of.

It should be noted that different obligations about the return or recycling of WEEE may apply in countries outside of Germany.

### 8 General

|                           |                                             |
|---------------------------|---------------------------------------------|
| Charger type.....         | GaN                                         |
| PD 3.0.....               | yes                                         |
| Operating conditions..... | 0 to +40 °C, 5 - 90 % RH (non-condensing)   |
| Storage conditions.....   | -35 to +70 °C, 0 - 90 % RH (non-condensing) |
| Protection class .....    | II                                          |

### 9 Technical data (Item No.: 3402154)

#### 9.1 Data according to EU regulation 2019/1782

|                                |                                                                                                              |
|--------------------------------|--------------------------------------------------------------------------------------------------------------|
| Manufacturer                   | Conrad Electronic SE, Klaus-Conrad-Str. 1, D-92240 Hirschau                                                  |
| Commercial registration number | HRB 3896                                                                                                     |
| Model identifier               | UC-1C1A20W01                                                                                                 |
| Input voltage                  | 100-240 V/AC                                                                                                 |
| Input AC frequency             | 50/60 Hz                                                                                                     |
| Output voltage                 | <b>USB-C®</b><br>5.0 V/DC 3.0 A Max. 15.0 W<br>9.0 V/DC 2.22 A Max. 19.98 W<br>12.0 V/DC 1.67 A Max. 20.04 W |
| Output current                 | <b>USB-A</b><br>5.0 V/DC 3.0 A Max. 15.0 W<br>9.0 V/DC 2.0 A Max. 18.0 W<br>12.0 V/DC 1.5 A Max. 18.0 W      |
| Output power                   | <b>USB-C® + USB-A</b><br>5.0 V/DC 3.0 A Max. 15.0 W                                                          |
| Average active efficiency      | 85.7 %                                                                                                       |
| Efficiency at low load (10 %)  | 79.0%                                                                                                        |
| No-load power consumption      | 0.10W                                                                                                        |

#### 9.2 Others

PPS ..... no

Dimensions (W x H x D) (approx.) ..... 36 x 15 x 81 mm  
Weight (approx.) ..... 40 g

10 Technical data (Item No.: 3402155)

10.1 Data according to EU regulation 2019/1782

|                                |                                                                                                             |
|--------------------------------|-------------------------------------------------------------------------------------------------------------|
| Manufacturer                   | Conrad Electronic SE, Klaus-Conrad-Str. 1, D-92240 Hirschau                                                 |
| Commercial registration number | HRB 3896                                                                                                    |
| Model identifier               | UC-1C1A25W01                                                                                                |
| Input voltage                  | 100-240 V/AC                                                                                                |
| Input AC frequency             | 50/60 Hz                                                                                                    |
| Output voltage                 | <b>USB-C®</b><br>5.0 V/DC 3.0 A Max.15.0 W<br>9.0 V/DC 2.77 A Max. 24.93 W<br>12.0 V/DC 2.08 A Max. 24.96 W |
| Output current                 | <b>USB-A</b><br>5.0 V/DC 3.0 A Max.15.0 W<br>9.0 V/DC 2.0 A Max.18.0 W<br>12.0V/DC 1.5 A Max.18.0 W         |
| Output power                   | <b>USB-C® + USB-A</b><br>5.0 V/DC 3.0 A Max.15.0 W                                                          |
| Average active efficiency      | 85.8 %                                                                                                      |
| Efficiency at low load (10 %)  | 81.5 %                                                                                                      |
| No-load power consumption      | 0.10 W                                                                                                      |

10.2 Others

PPS ..... yes  
Dimensions (W x H x D) (approx.) ..... 36 x 15 x 81 mm  
Weight (approx.) ..... 50 g

11 Technical data (Item No.: 3402409)

11.1 Data according to EU regulation 2019/1782

|                                |                                                                                                                                                                       |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manufacturer                   | Conrad Electronic SE, Klaus-Conrad-Str. 1, D-92240 Hirschau                                                                                                           |
| Commercial registration number | HRB 3896                                                                                                                                                              |
| Model identifier               | UC-1C1A30W01                                                                                                                                                          |
| Input voltage                  | 100-240 V/AC                                                                                                                                                          |
| Input AC frequency             | 50/60 Hz                                                                                                                                                              |
| Output voltage                 | <b>USB-C®</b><br>5.0 V/DC 3.0 A Max.15.0 W<br>9.0 V/DC 3.0 A Max. 27.0 W<br>12.0 V/DC 2.5 A Max. 30.0 W<br>15.0 V/DC 2.0 A Max. 30.0 W<br>20.0 V/DC 1.5 A Max. 30.0 W |
| Output current                 | <b>USB-A</b><br>5.0 V/DC 3.0 A Max.15.0 W<br>9.0 V/DC 2.0 A Max.18.0 W<br>12.0 V/DC 1.5 A Max.18.0 W                                                                  |
| Output power                   | <b>USB-C® + USB-A</b><br>5.0 V/DC 3.0 A Max.15.0 W                                                                                                                    |
| Average active efficiency      | 84.6 %                                                                                                                                                                |
| Efficiency at low load (10 %)  | 81.4 %                                                                                                                                                                |
| No-load power consumption      | 0.10 W                                                                                                                                                                |

11.2 Others

PPS ..... yes  
Dimensions (W x H x D) (approx.) ..... 36 x 15 x 81 mm  
Weight (approx.) ..... 40 g

12 Technical data (Item No.: 3401961)

12.1 Data according to EU regulation 2019/1782

|                                |                                                                                                                                                                        |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manufacturer                   | Conrad Electronic SE, Klaus-Conrad-Str. 1, D-92240 Hirschau                                                                                                            |
| Commercial registration number | HRB 3896                                                                                                                                                               |
| Model identifier               | UC-45W001                                                                                                                                                              |
| Input voltage                  | 100-240 V/AC                                                                                                                                                           |
| Input AC frequency             | 50/60 Hz                                                                                                                                                               |
| Output voltage                 | <b>USB-C®</b><br>5.0 V/DC 3.0 A Max.15.0 W<br>9.0 V/DC 3.0 A Max. 27.0 W<br>12.0 V/DC 3.0 A Max. 36.0 W<br>15.0 V/DC 3.0 A Max. 45.0 W<br>20.0 V/DC 2.25 A Max. 45.0 W |
| Output current                 | <b>USB-A</b><br>5.0 V/DC 3.0 A Max.15.0 W<br>9.0 V/DC 2.0 A Max.18.0 W<br>12.0 V/DC 1.5 A Max. 18 W                                                                    |
| Output power                   | <b>USB-C® + USB-A:</b> 30.0 W + 12 W Max. 45 W                                                                                                                         |
| Average active efficiency      | 88.00 %                                                                                                                                                                |

|                               |       |
|-------------------------------|-------|
| Efficiency at low load (10 %) | 85.3% |
| No-load power consumption     | 0.2W  |

12.2 Others

PPS ..... yes  
Dimensions (W x H x D) (approx.) ..... 43 x 17.5 x 76.4 mm  
Weight (approx.) ..... 45 g

13 Technical data (Item No.: 3402158)

13.1 Data according to EU regulation 2019/1782

|                                |                                                                                                                                                                         |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manufacturer                   | Conrad Electronic SE, Klaus-Conrad-Str. 1, D-92240 Hirschau                                                                                                             |
| Commercial registration number | HRB 3896                                                                                                                                                                |
| Model identifier               | UC-65W001                                                                                                                                                               |
| Input voltage                  | 100-240 V/AC                                                                                                                                                            |
| Input AC frequency             | 50/60 Hz                                                                                                                                                                |
| Output voltage                 | <b>USB-C®</b><br>5.0 V/DC 3.0 A Max. 15.0 W<br>9.0 V/DC 3.0 A Max. 27.0 W<br>12.0 V/DC 3.0 A Max. 36.0 W<br>15.0 V/DC 3.0 A Max. 45.0 W<br>20.0 V/DC 3.25 A Max. 65.0 W |
| Output current                 | <b>USB-A</b><br>5.0 V/DC 3.0 A Max.15.0 W<br>9.0 V/DC 2.0 A Max.18.0 W<br>12.0 V/DC 1.5 A Max.18.0 W                                                                    |
| Output power                   | <b>USB-C® + USB-A</b> : 45.0 W + 12.0 W Max. 65.0 W                                                                                                                     |
| Average active efficiency      | 87.2 %                                                                                                                                                                  |
| Efficiency at low load (10 %)  | 78.4 %                                                                                                                                                                  |
| No-load power consumption      | 0.30 W                                                                                                                                                                  |

13.2 Others

PPS ..... yes  
Dimensions (W x H x D) (approx.) ..... 46 x 17.5 x 92.6 mm  
Weight (approx.) ..... 70 g

This is a publication by Conrad Electronic SE, Klaus-Conrad-Str. 1, D-92240 Hirschau (www.conrad.com).  
All rights including translation reserved. Reproduction by any method (e.g. photocopying, microfilming or the capture in electronic data processing systems) requires prior written approval from the editor. Reprinting, also in part, is prohibited. This publication reflects the technical status at the time of printing.  
Copyright by Conrad Electronic SE.  
\*3402154 3402155 3402409\_V4\_1025\_dh\_mh\_en 63050396959347211 I8/O4 en