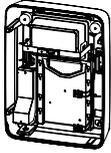


# **SOLARWATT MYRESERVE QUICK INSTALLATION GUIDE**

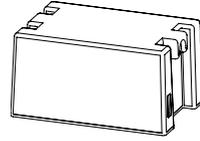
# Supply package for base system



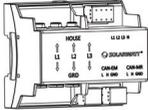
1x housing with MR Control **(A)**



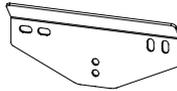
1 x MyReserve front panel **(B)**



SOLARWATT MR Pack 2.2<sup>1)</sup> **(C)**  
1x for MyReserve 500 (2.2 kWh)  
2x for MyReserve 500/800 (4.4 kWh)



1x SOLARWATT AC sensor 50  
or 1x AC-Sensor 63<sup>2)</sup> **(D)**



1 x MyReserve wall mount **(E)**



3 x screw (M6 x 25mm) **(F)**  
(hexagon socket)



1 set of product documentation<sup>3)</sup>  
**(G)**



2 x screw (M6 x 10mm) **(H)**  
(hexagon socket)



jumper plug<sup>4)</sup> **(I)**

1) Supplied separately

2) Please note that you must order the AC-Ssensor 50 or AC-Sensor 63 separately.

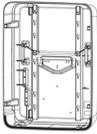
It is not automatically included in the delivery.

3) 1x MyReserve installation and operating instructions, 1x MyReserve user manual,

1x commissioning log, 2x instruction stickers indicating MyReserve switch-on and switch-off sequence

4) only included for MyReserve 500 (2.2 kWh)

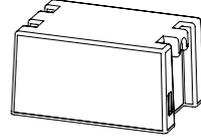
## Supply package for extension



1 x extension housing **(J)**  
with cable harness (1 or 2 battery  
plugs) **(K)**



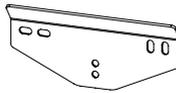
1 x MyReserve front panel **(L)**



SOLARWATT MR Pack 2.2<sup>1)</sup> **(C)**  
1 x for MyReserve Extension (2.2 kWh)  
2 x for MyReserve Extension (4.4 kWh)



2x cable gland **(M)**



1 x MyReserve wall mount **(E)**



3 x screw (M6 x 25mm) **(F)**  
(hexagon socket)



1 set of product documentation<sup>2)</sup> **(G)**



2x screw (M6 x 10mm) **(H)**  
(hexagon socket)

1) Supplied separately

2) 1x MyReserve installation and operating instructions, 1x MyReserve user manual,  
1x commissioning log, 2x instruction stickers indicating MyReserve switch-on and switch-off sequence

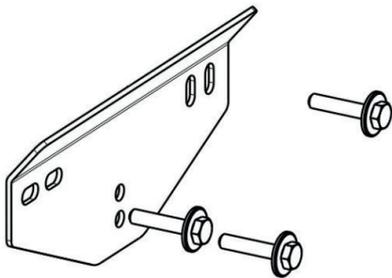
# Additional components/materials required

- Drill/battery-operated screwdriver, depending on fastening surface
- at least 4 screws (8 mm Ø), wall plugs (10 mm Ø) depending on fastening surface **(N)**
- Twisted pair cable for CAN communication (min. Cat5.e) **(O)**
- DC cable (min. 4 mm<sup>2</sup>) to connect to the inverter **(P)**
- DC cable (min. 4 mm<sup>2</sup>) to connect to the PV system **(Q)**
- AC cable (minimum 3 x 1.5 mm<sup>2</sup>) for the MyReserve power supply **(R)**
- Wire end ferrules
- Crimp tool
- Automatic circuit breaker (max. 6 A) for MyReserve power supply **(S)**
- Automatic circuit breaker max. 40 A for AC Sensor 50 for house connections greater than 40 A **(S)**
- If AC Sensor 63 is used:
  - 3-pole line protector / cut-off switch located near the AC Sensor 63 in the meter cabinet where it is easily accessible and is labeled as a disconnection device for the AC Sensor 63; tripping characteristic B10A or B16A
- MyReserve installation tool (available on request or free when participating in a MyReserve certification training session)



## Installation

### 1. Fasten wall bracket



Use the wall bracket **(E)** as a drilling template. Use at least 3 screws to fasten the wall bracket. The wall should be able to bear a static load of at least 80 kg.  
Recommended: 3 x wall plug, 10 mm, with 8 mm screw

#### NOTE

Fasteners for wall fixing are not included in the scope of delivery.

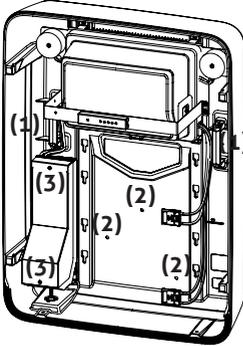
Horizontal installation



#### CAUTION

If you are need to attach a second housing for the MyReserve extension, observe the maximum possible gap between the two housings. You will find more information in the detailed installation and operating instructions.

## 2. Attach and fasten housing body



Lift the housing body **(A)** / **(J)** onto the wall bracket using both handles **(1)**.

Secure the housing against unintended removal by fastening a screw through one of the three asymmetrically arranged holes **(2)**.

Remove the two screws **(3)** and lift the cover off in order to expose the terminal block.

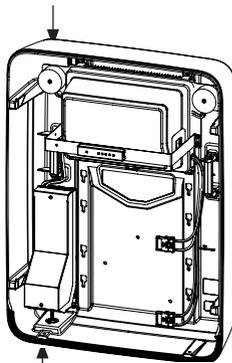
### **i** NOTE

Fasteners for wall fixing are not included in the scope of delivery.

## 3. Insert cables into the housing body

### MyReserve 500 / 800

cable inlet

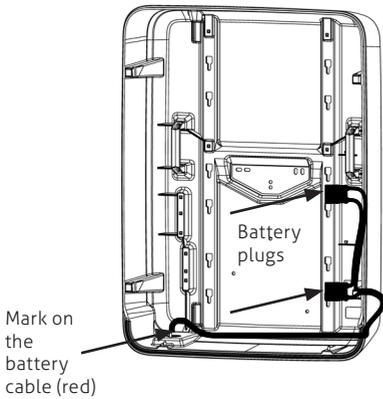


cable inlet

Insert the DC line from the inverter **(P)**, the power supply line **(R)** and the ACS data cable **(O)** into the housing body **(A)** from below. Insert the DC line to connect to the PV system **(Q)** into the housing from above.

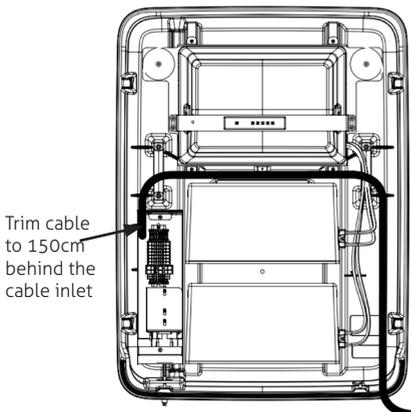
Be careful not to damage the cable inlet when doing so.

## MyReserve Extension



Screw one of the two supplied cable glands (**M**) into the hole at the lower left corner of the MyReserve Extension housing.

Pull the end of the battery cable which has no plug from the cable harness (**K**) through the cable inlet in the MyReserve extension housing. In doing so, pull battery cable through as far as the red mark and use the cable anchorage to tighten and fasten it.



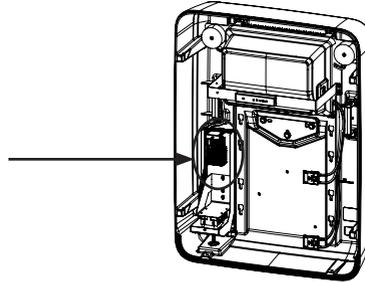
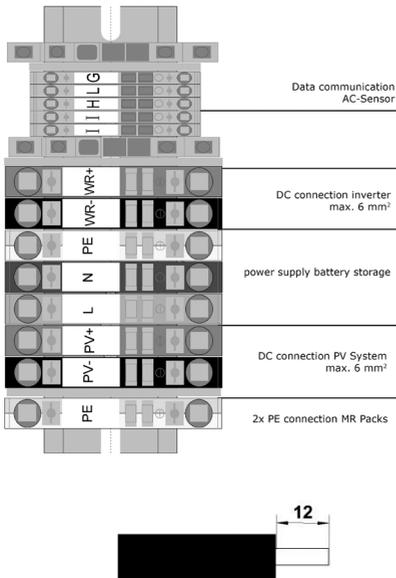
Remove the dummy plug from the cable inlet in the basic housing of MyReserve 800. Screw the supplied cable gland (**M**) into the cable input opening.

Feed the battery cable through the cable input in the MyReserve 800 and trim cable to 150 cm behind the cable inlet.

Route the battery cable between the MR control and the upper battery module to the terminal strips.

## 4. Electrical connection

### MyReserve 500



Connect the DC connection line from the PV system, inverter, power supply and ACS data cable as shown in the diagram on the left.

Poss. PV/inverter connecting cable gauge: 4-6 mm<sup>2</sup>

Poss. AC connection gauge: 1.5-2.5 mm<sup>2</sup>

Poss. communication/ACS connection cable gauge: 0.5-1.5 mm<sup>2</sup>

Re-attach the terminal block cover once the connecting cables have been installed.

## 5 Safety rules

Follow lock out steps

- 1) Verify absence of voltage
- 2) Lock out isolator(s)
- 3) Disconnect
- 4) Ground and short circuit as required
- 5) Provide protection from adjacent live parts

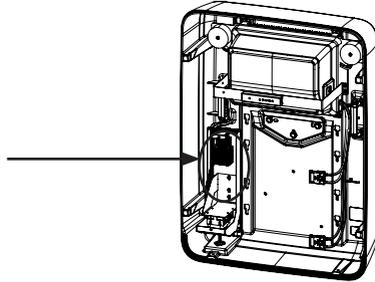
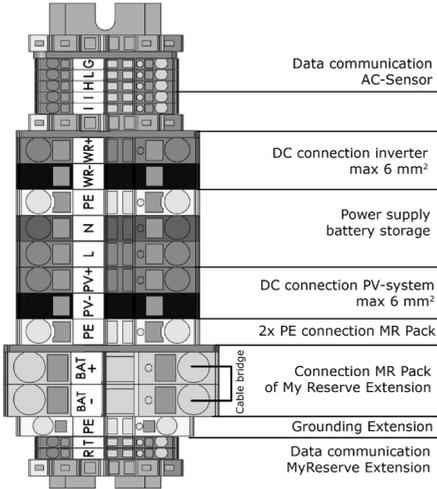


## ⚠ CAUTION

Only qualified electricians may put SOLARWATT MyReserve storage battery system into operation. There is a risk of electric shock.

# MyReserve 800

Terminal-strip MyReserve 800 WITHOUT Extension  
 ATTENTION: The cable bridge must NOT be removed if a MyReserve Extension is not connected!



Connect the DC connection line from the PV system, inverter, power supply and ACS data cable as shown in the diagram on the left.

Poss. PV/inverter connecting cable gauge: 4-6 mm<sup>2</sup>

Poss. AC connection gauge: 1.5-2.5 mm<sup>2</sup>

Poss. communication/ACS connection cable gauge: 0.5-1.5 mm<sup>2</sup>

Re-attach the terminal block cover once the connecting cables have been installed.



## 5 Safety rules

Follow lock out steps

- 1) Verify absence of voltage
- 2) Lock out isolator(s)
- 3) Disconnect
- 4) Ground and short circuit as required
- 5) Provide protection from adjacent live parts



## CAUTION

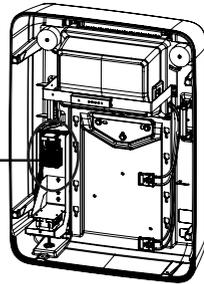
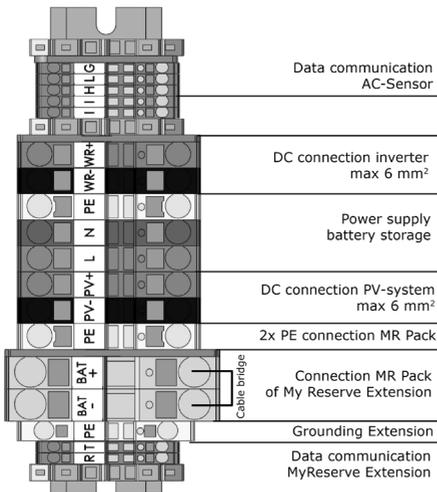
Only qualified electricians may put SOLARWATT MyReserve storage battery system into operation. There is a risk of electric shock.

# MyReserve 800 with extension

## CAUTION

The terminal units for the extension connections BAT+ and BAT- are bridged when they are delivered. This cable bridge must be removed before installing cables.

Terminal-strip MyReserve 800 WITH Extension

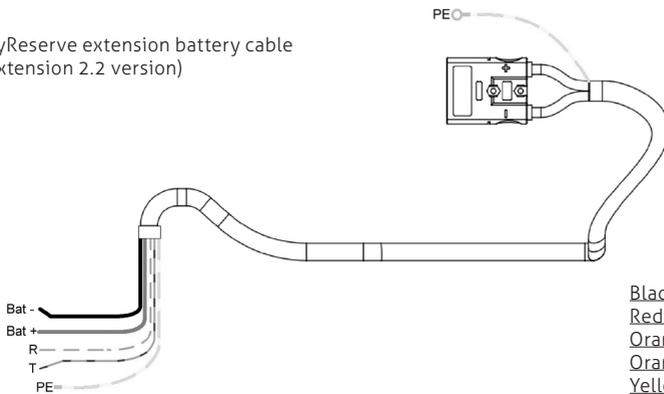


Connect the DC connection line from the PV system, inverter, power supply and ACS data cable as shown in the diagram on the left.

- Poss. PV/inverter connecting cable gauge: 4-6 mm<sup>2</sup>
- Poss. AC connection gauge: 1.5-2.5 mm<sup>2</sup>
- Poss. communication/ACS connection cable gauge: 0.5-1.5 mm<sup>2</sup>

Re-attach the terminal block cover once the connecting cables have been installed.

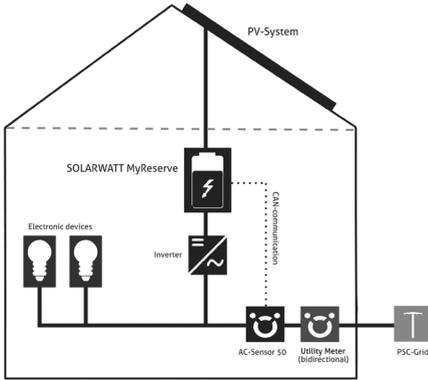
MyReserve extension battery cable (Extension 2.2 version)



Black	BAT-
Red	BAT+
Orange/white	R
Orange/brown	T
Yellow/green	PE

## 5. Incorporating the AC sensor

Install the SOLARWATT AC sensor between the ESC meter and all electrical loads in the household. See the following diagram for more information.



### CAUTION

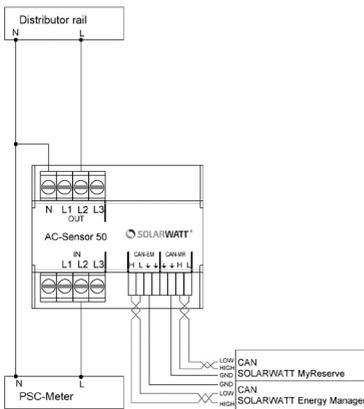
Connect the devices in a de-energized state. Secure the system against re-connection! There is a risk of electric shock. Observe the manufacturer's operating instructions during installation.

### Circuit for ACS 50

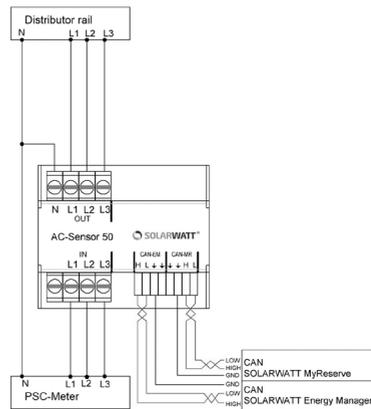
The AC connection features conventional screw terminals. The connection terminals for CAN communication are designed as spring-clamp terminals.

### IMPORTANT

Gauge for the phases and neutral line connection section      10 mm<sup>2</sup> insulated  
 Gauge for the communication connection section      0.75 mm<sup>2</sup>-2.5 mm<sup>2</sup> insulated



Single-phase connection



Three-phase connection

## Circuit for ACS 63

The voltage measurement and communication connection point features spring-clamp terminals.



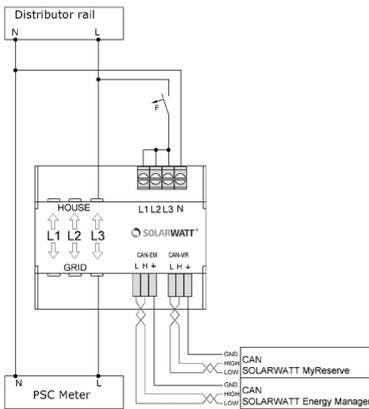
### IMPORTANT

External wire gauge in the feed-through section for external wire (current measurement)

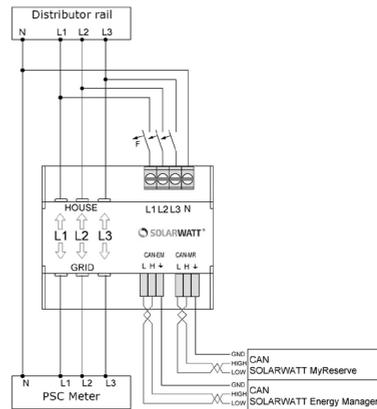
10 mm<sup>2</sup> insulated

Gauge for neutral and external wire in the connection section (voltage measurement) and communication

0.75 mm<sup>2</sup>- 2.5 mm<sup>2</sup> insulated



Single-phase connection



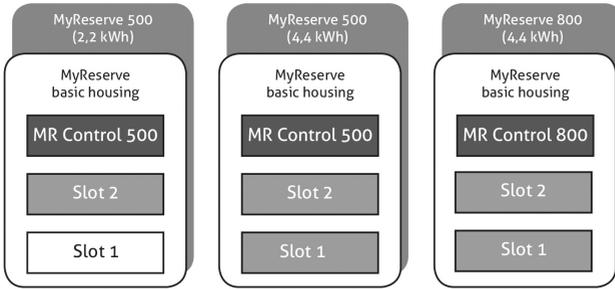
Three-phase connection



### IMPORTANT

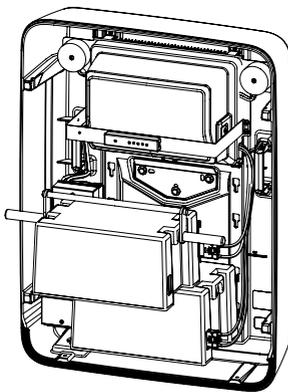
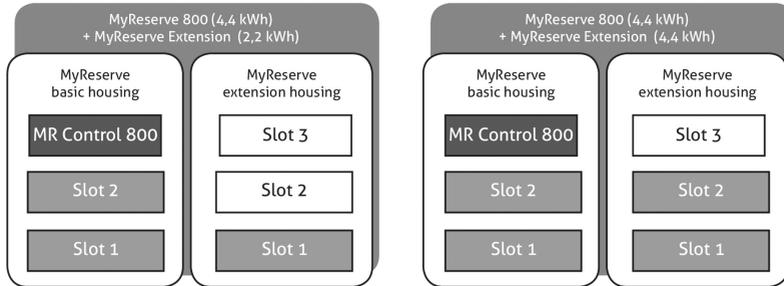
The fuse protection for the voltage measurement lines may also be executed with a double tap on an existing circuit breaker if you comply with applicable standards and manufacturer specifications.

## 6. Install SOLARWATT MR Pack 2.2



Install the required number of battery modules according to the version of the MyReserve.

The figure shows for each MyReserve configuration the slots to be used for the battery modules (gray marked). The white-marked slots are not used.



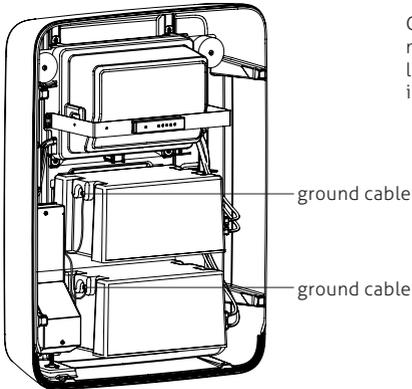
Raise the battery modules into the housing using the MyReserve installation tool. The four bolts on the rear must be inserted into their designated grooves.



Observe the leveling marks for positioning the battery modules.

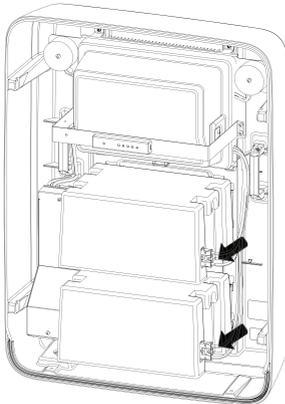
The top edge of the SOLARWATT MR Pack 2.2 must form a line with the leveling mark.

## 7. Connecting the ground cable(s)



Connect a ground cable to each battery module. The fastening point is located on the left side of the battery modules (M6 x 10 mm internal thread; screws **(H)**).

## 8. Connect battery modules with MR Control

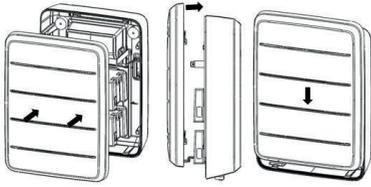


Plug all battery cables into the corresponding battery modules, both in the basic housing and in the extension housing.

### CAUTION

If only one battery module has to be installed (MyReserve 500 (2.2 kWh)), attach the jumper plug **(I)** that is included in the delivery to the unused battery cable (the longer one of the two!).

## 9. Fitting and fastening the front panel(s)



Slide the front panel(s) **(B) / (L)** into the interlock position in the housing **(A) / (J)** from above.



Turn the screws **(F)** into the designated holes in the base of MyReserve or its extension. One screw will need to be fastened through the switch disconnecter on MyReserve.

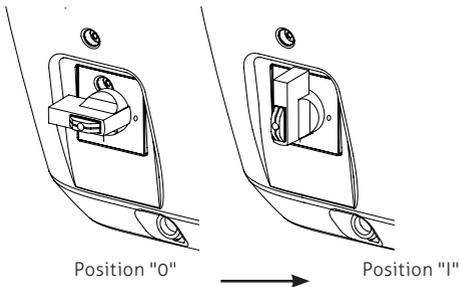
## Switching on

### CAUTION

You must follow an exact sequence when switching on MyReserve! Follow the steps in the strict order specified below.

- I. Check the polarity of the DC line from the PV system
- II. Check the polarity of the DC lines to the PV inverter

1. **Switch on the AC supply on the downstream inverter.**
2. **Close the DC cut-off switch on the downstream inverter.**
3. **Turn the DC cut-off switch on the MyReserve to the "I" position.**



4. **Wait until the downstream inverter has found its operating point.**
5. **Switch on the AC power supply for the SOLARWATT MyReserve.**

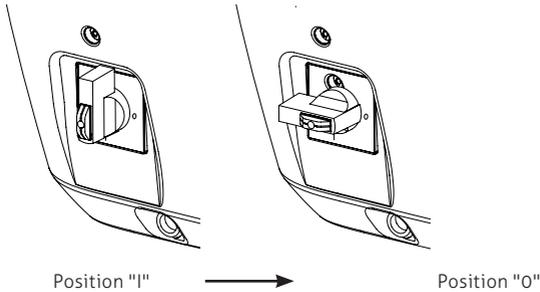
The status LED on the front of the SOLARWATT MyReserve will now continuously light up in blue.

## Switching off

### CAUTION

You must follow an exact sequence when switching off MyReserve! Follow the steps in the strict order specified below.

1. **Switch off the AC power supply for the SOLARWATT MyReserve.**
2. **Turn the DC cut-off switch on the MyReserve to the "0" position.**



3. **Switch off the downstream inverter according to the specifications of the inverter manufacturer. Observe the specified shut-off sequence for the AC and DC connection when doing so.**

## Supported devices

PV inverter	All standard string inverters comply with the technical configuration parameters for SOLARWATT MyReserve
Battery	SOLARWATT MR Pack 2.2
Current sensor	SOLARWATT AC Sensor 50 and 63
Energy management	SOLARWATT Energy Manager
DC current source	Crystalline/amorphous SI photovoltaic modules



Used electrical and electronic devices often contain valuable materials.  
Do not dispose of used devices in the household waste.  
Dispose of the device at a municipal collection center for electronic waste.  
Battery modules have to be disposed of separately.

Further information can be found in the operation / installation instructions and the SOLARWATT MyReserve data sheet.

Subject to errors and changes. Information may be changed at any time without prior notification | 2016 SOLARWATT GmbH

## CONTACT

Are you interested in our products and services?  
We'll be glad to advise you. Just give us a call.

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