

### 1 - Preparations

Check package contents:

- 1 x DC Power Monitor
- 1 x Hall sensor, 2m cable
- 1 x Temperature sensor
- 1 x Installation Guide

### 2 - Mounting



Mount the DC Power Monitor in a free space on a DIN rail.

Pull down on release catch to mount.

### 3 - Mount Hall Sensor

**3a** Mount the hall sensor on the power wire of the load to be measured. Observe the sensor orientation. In the example here, the sensor vane should point towards the load, and away from the power source or rectifier. Use a cable strap to fix the sensor in place.

**3b** At the other end of the cable, insert the green push-connector into the socket to the right on the underside of the Netbiter DC Power Monitor, as shown here.



This example shows a load with negative earth. To measure a load with positive earth, the sensor must be mounted the other way round.



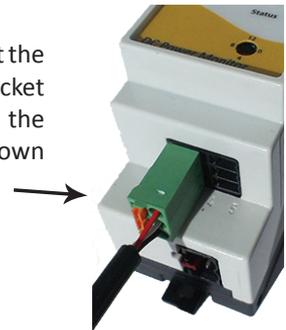
### 4 - Connect Temp Sensor

**4a** Mount the temperature sensor in the required location (not shown here).



**4b**

At the other end of the cable, insert the green push-connector into the socket to the left on the underside of the Netbiter DC Power Monitor, as shown here.



### 5 - Voltage Measurement

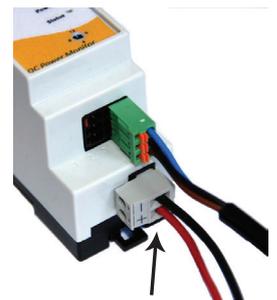
**5a** To set up voltage measurement, connect a 2-wire cable to the site equipment to be measured (not shown here).



**Important!** The voltage connection must be fused (max 10A) using an inline fuse holder.

**5b**

Using the slotted screwdriver, connect the other end of the 2-wire cable to the grey plug connection on the Netbiter DC Power Monitor, paying close attention to the +/- poles.



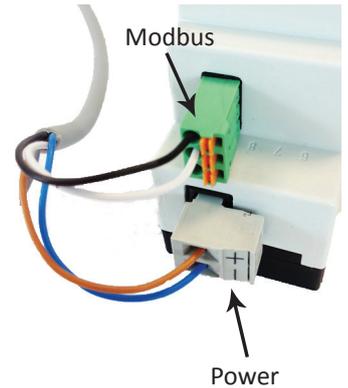
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### 6 - Modbus & Power

Connectors for the 24 VDC power supply and Modbus are located on the top of the Netbiter DC Power Monitor.

For further information, see also:  
**Netbiter EasyConnect User Manual**

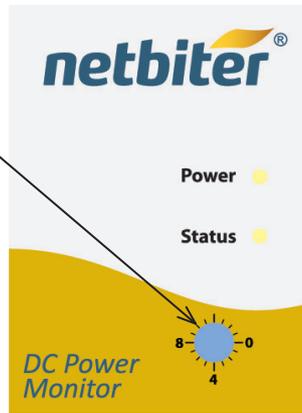
- 6a** Connect Modbus wire A (black) to Pin 1 of the Modbus connector.
- 6b** Connect Modbus wire B (white) to Pin 2 (middle pin) of the Modbus connector.
- 6c** Connect 0V to the (-) terminal of the power supply connector.
- 6d** Connect +24V to the (+) terminal of the power supply connector.



### 7 - Modbus ID Setting

The selector screw on the front of the unit provides quick setting of 15 different Modbus ID's. See the table to the right.

Any other Modbus ID must be set from software. Set this screw to 0 (= Modbus ID 1 by default) and contact HMS support for further information.



Selector Position	Modbus ID
0	Modbus ID 1 (or other ID via software)
1	Modbus ID 31
2	Modbus ID 32
3	Modbus ID 33
4	Modbus ID 34
5	Modbus ID 35
6	Modbus ID 36
...	...
15	Modbus ID 45

All other device settings are available at Netbiter Argos, after the DC Power Monitor has been added to a user account using a **device template** or **device profile**. Please see the **Netbiter Argos Administration Manual** for further details.

### Technical Specifications

Modbus Address	Description
1	Measured current
2	Measured voltage
3	Measured watts
10	Temperature
20	Total Wh
22	Total Wh Incoming
24	Total Wh Outgoing
26	Delta In/Out Wh
30	Alarm
52	Overconsumption time factor
53	OC1 Power setting
54	OC2 Power setting

Time constant in seconds for overconsumption alarms.  
Allowed settings: 60,120,180,240,300,600,900,1800,3600

Over-consumption alarm 1 will be triggered when the average **consumed** energy exceeds this level within the time period specified in **Overconsumption Time Factor**.

Over-consumption alarm 2 will be triggered when the average **overcharging** energy exceeds this level within the time period specified in **Overconsumption Time Factor**.