

Home » Glossary » What is Bidirectional Meter?

What is Bidirectional Meter?

By Elliot Clark — November 17, 2023 — GLOSSARY



A bidirectional meter is a **meter that oscillates both up and down**. When you import power from the grid and export power into the grid, it goes forward and backward, respectively.

Your home's electric meter detects the current passing through it and records the **total amount consumed based on the net flow of current**. They lack directional sensitivity in their meters. Therefore, whether there is an import or export, it will continue to proceed. It progressively raises the export meter reading as well. Which entails charging more for your export and not generating any savings on your electricity bill.

A bi-directional meter **detects the direction of the current flow** and records the information in a different register. Most loads are off-stage during the day, and any excess energy generated by solar panels is sent back to the grid (Export).

The direction of the current flow is backward at this point, and the meter puts the data in the export register. Because there is no solar generation during the night, the **load is powered by imported grid electricity**. Now that the current is flowing forward, the meter saves the data in the import register.

How to understand Solar Bi-directional Meter?

BESCOM gave Secure permission to distribute Bi-Directional Meters in order to prevent electric theft and to adhere to a special solar policy procedure. Basically, we use four different types of bi-directional meters based on how connected they are to the grid.

- Bi-Directional Single Phase Two Wire Meter
- Four wires in three phases. Bi-Directional Whole Current Meter.
- Four wires in three phases. Bi-Directional Meter run by CT.
- Bi-Directional Three Phase Four Wire Meter.

Ways to understand bidirectional meter:

Here are some indicators to understand bidirectional meter.

- **Name Plate:** The Name Plate lists the electrical characteristics of the meter, including the kind of connection, voltage, current, frequency, etc. On the nameplate, in addition to electrical information, they list the firm name, warranty information, and serial number.
- **LCD Display:** A sizable LCD display that displays the many electrical parameters that the meter has captured. For presenting certain information, the LCD display comprises a number of sections.
- **Push Buttons:** The meter has two push buttons, the MD push button, and the Scroll push button. We can scroll the display by pushing the scroll push button. Each display presents a separate system parameter.
- **Optical Cable:** An optical cable can be used to send and receive data to and from the meter through the 1107 Port, which is optically separated and sealable.
- **Terminal Block:** The meter has input and output terminals. We may also see a communication connector on the left.
- **Connection Diagram:** The top of the terminal cover block is labeled with a connection diagram.

Also Read: [What is an Alternator?](#)

How to take the reading from Bi-directional Meter?

In a Single Phase Bi-Directional Meter, numbers are used to indicate the top portion, which essentially indicates the value of the electric parameter. The unit of the electric parameter is indicated in the right corner portion. Any electric grid parameter could be **stored in a smart electric meter**. However, meters now come with a pre-setting display for the convenience of both the meter reader and the consumer.



Elliot Clark

Elliot is a passionate environmentalist and blogger who has dedicated his life to spreading awareness about conservation, green energy, and renewable energy. With a background in environmental science, he has a deep understanding of the issues facing our planet and is committed to educating others on how they can make a difference.

RELATED POSTS

What is Heating Seasonal Performance Factor (HSPF)?

February 3, 2024

What is Annual Fuel Utilization Efficiency (AFUE)?

February 2, 2024

What is Grid Parity?

January 31, 2024

[ADD A COMMENT](#)

ABOUT

We envision a world where clean, renewable energy sources power our lives, and recycling becomes an integral part of everyday living.

Our mission is to empower individuals, businesses, and communities to embrace sustainable practices that protect our planet and ensure a brighter tomorrow for generations to come.

LATEST

Solar Tracking System: Working, Types, Pros, and Cons

February 13, 2024

Top 7 Reasons Why Carbon Capture and Storage is a Bad Idea

February 13, 2024

25 Upcycled or Eco-friendly Valentine's Day Gifts

February 13, 2024

30 Practical Ways to Reduce Water Pollution

February 9, 2024

21 Best Sustainable and Ethical Chocolate Brands

February 9, 2024

Causes, Effects and Solutions of Groundwater Depletion

February 8, 2024

How much do You Save on Gas with a Tesla?

February 8, 2024

5 Harmful Effects of Plastic on Human Health and Environment

February 7, 2024

We envision a world where clean, renewable energy sources power our lives, and recycling becomes an integral part of everyday living.

Our mission is to empower individuals, businesses, and communities to embrace sustainable practices that protect our planet and ensure a brighter tomorrow for generations to come.



SOLUTIONS

[FAQs](#)

[Glossary](#)

[Green](#)

[Latest News](#)

[Renewable](#)

[Reviews & Comparison](#)

[Solar](#)

RECENT POSTS

Solar Tracking System: Working, Types, Pros, and Cons

Top 7 Reasons Why Carbon Capture and Storage is a Bad Idea

25 Upcycled or Eco-friendly Valentine's Day Gifts

30 Practical Ways to Reduce Water Pollution

© 2024 Framed Media

[Home](#) | [About Us](#) | [Privacy Policy](#) | [Terms](#) | [Contact Us](#)