Foundations

Charts are a common data visualization solution, and they are a part of many Eaton products and interfaces. In this page you can learn about the elements that compose our chart components, how they relate to each other and the design rules to put these elements together.

Building Blocks

[Design System Image]

• **Multiple values** - To be used on Line and Bar charts, whenever a user can hover a data point that has more than one dataset associated with it. • **Single value** - To be used on all Pie charts and smaller versions of Bar and Pie charts, whenever a user hovers a datapoint that has only one dataset associated with it OR for smaller chart sizes that require a smaller tooltip. } /> • **Solar forecasting** - using weather forecast data, the chart displays a background vertically split into 2 areas: light blue for Night time and light yellow for Day time. The precise length of these backgrounds is a variable, determined by factors such as time of the year and geographical position. • **Healthy range** - an underlay that conveys critical information to users regarding safety thresholds. The background is horizontally split into 3 areas: Safe (light green), Warning (light yellow) and Critical (light red). It can be used in tandem with Reference Lines to ensure users understand the meaning of the colors. **To customize the design of charts that use underlays, designers will need to detach the component instance and resize these areas manually.** } /> • **Limits / thresholds** - a Horizontal reference line that indicates preset values such as Safe / Critical / Warning, Minimum or Maximum and others • **Current Time** - a Vertical reference lines that moves along the X-Axis as the day goes by, to help users make a distinction between historical and forecast data (also indicated by solid and dashed lines) • **Average** - a Horizontal reference that indicates the average values for data points in the Y-Axis. The average value can be calculated using the time

period being displayed on the chart, or an all-time average. } />

Data granularity

Charts commonly include the option to browse historical data, going back in time or zooming out to display data points spread across a day, a week, a month or a year. This is a high value feature for our end users, as it allows them to identify patterns and obtain additional insights. In Brightlayer UI charts, this process of data wrangling is done through our Data Granularity component, made using icons and components from Brightlayer UI:

[Design System Image]

• Y-Axis is placed vertically on the left or right of the chart, and is often used to display sequential values (such as 10kW, 20kW, 30kW). • X-Axis is placed horizontally below the chart, and is often used to display time intervals (such as 08:00, 09:00, 10:00). It's common practice to use abbreviated labels on both axis to save space. You can use the first three letters of the word for months and days of the week (such as Mon, Tue, Wed or Jan, Feb, Mar).

Avoid using long labels on the Y-Axis if possible, as this will affect the look and functionality of both the chart and the tooltip component. If long labels can’t be avoided, talk to your development team about the possibility of truncating them.

The Brightlayer UI sticker sheet includes additional unit options, available in Figma by selecting the Axis component (within the chart layers) and changing its variant. } />

Chart sizes

Our Figma sticker sheet offers each chart in three different sizes.

Picking the appropriate size is important, as it ensures a more seamless integration with dashboards built using components from Brightlayer UI.
The Medium and Small components in the Figma sticker sheet include limited features compared to their Large versions. This is a conscious decision based on our research and

user testing: as the chart size shrinks, less space is available to display all the relevant information inside the plot area.
If your product requires additional options for Medium or Small charts, both our Figma and Storybook components can be locally customised by your team.
When choosing the appropriate size of your chart, consider the following:

Large - 960 x 600px To be used on desktop, spanning the full width of available screen space. This is the best version if you want to avail of advanced features such as Forecasting and Underlays.
Medium - 420 x 300px To be used on desktop or tablet, spanning 4-6 columns of your grid.
Small - 320 x 200px To be used on desktop, tablet or mobile, spanning 3 columns of your grid (full width on mobile).