

# react-calculator-latex

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A React library for creating a calculator with LaTeX rendering support.

## Installation

You can install the package via npm:

```
npm install react-calculator-latex
```

## Usage

### Calculator Component

The **Calculator** component provides a user interface for inputting expressions and displaying the result with LaTeX rendering.

```
import React from 'react';
import { CalculatorContent, useCalculator } from 'react-calculator-latex';

const App = () => {
  const calculator = useCalculator();

  return (
    <div>
      <CalculatorContent calculator={calculator} />
    </div>
  );
};

export default App;
```

## Types and Components Documentation

### CalculatorContent Component

```
import { CalculatorContentProps } from "../lib/types";
/**
 * A React component that renders the calculator input and integrates core
 * functionality.
 *
 * @param {CalculatorContentProps} props - The props for the CalculatorContent
 * component.
 * @param {Calculator} props.calculator - The calculator instance to use.
```

```
* @param {string} [props.className=""] - Optional CSS class for the wrapper div.
* @param {React.CSSProperties} [props.style={}] - Optional inline styles for the
wrapper div.
* @param {string} [props.inputClassName=""] - Optional CSS class for the input
element.
* @param {React.CSSProperties} [props.inputStyle={}] - Optional inline styles for
the input element.
*/
export default function CalculatorContent({ calculator, className, style,
inputClassName, inputStyle, }: CalculatorContentProps): import("react/jsx-
runtime").JSX.Element;
```

## CalculatorDisplay Component

```
import { CalculatorDisplayProps } from "../lib/types";
/**
 * Component for displaying the calculated expression using KaTeX.
 *
 * @param {CalculatorDisplayProps} props - Props for CalculatorDisplay.
 * @param {string} props.expression - The mathematical expression to render.
 */
declare const CalculatorDisplay: ({ expression }: CalculatorDisplayProps) =>
import("react/jsx-runtime").JSX.Element;
export default CalculatorDisplay;
```

## useCalculator hook

```
import { Calculator, CalculatorOptions } from "../lib/types";
/**
 * Custom hook to create and manage a calculator instance.
 *
 * @param {CalculatorOptions} [options] - Configuration options for the
calculator.
 * @returns {Calculator} An object with calculator functionality.
 */
export declare const useCalculator: (options?: CalculatorOptions) => Calculator;
```