

## tf.sparse\_reduce\_sum\_sparse

```
sparse_reduce_sum_sparse(  
    sp_input,  
    axis=None,  
    keep_dims=False,  
    reduction_axes=None  
)
```

Defined in [tensorflow/python/ops/sparse\\_ops.py](#).

See the guide: [Sparse Tensors > Reduction](#)

Computes the sum of elements across dimensions of a SparseTensor.

This Op takes a SparseTensor and is the sparse counterpart to `tf.reduce_sum()`. In contrast to SparseReduceSum, this Op returns a SparseTensor.

Reduces `sp_input` along the dimensions given in `reduction_axes`. Unless `keep_dims` is true, the rank of the tensor is reduced by 1 for each entry in `reduction_axes`. If `keep_dims` is true, the reduced dimensions are retained with length 1.

If `reduction_axes` has no entries, all dimensions are reduced, and a tensor with a single element is returned. Additionally, the axes can be negative, which are interpreted according to the indexing rules in Python.

### Args:

- `sp_input`: The SparseTensor to reduce. Should have numeric type.
- `axis`: The dimensions to reduce; list or scalar. If `None` (the default), reduces all dimensions.
- `keep_dims`: If true, retain reduced dimensions with length 1.
- `reduction_axes`: Deprecated name of axis

### Returns:

The reduced SparseTensor.

---

Except as otherwise noted, the content of this page is licensed under the [Creative Commons Attribution 3.0 License](#), and code samples are licensed under the [Apache 2.0 License](#). For details, see our [Site Policies](#). Java is a registered trademark of Oracle and/or its affiliates.

Last updated November 2, 2017.

### Stay Connected

[Blog](#)

[GitHub](#)

[Twitter](#)

Support

[Issue Tracker](#)

[Release Notes](#)

[Stack Overflow](#)

English

[Terms](#) | [Privacy](#)