

# **lumped\_port**

Hfss.lumped\_port(*signal*, *reference*=None, *create\_port\_sheet*=False, *port\_on\_plane*=True, *integration\_line*=0, *impedance*=50, *name*=None, *renormalize*=True, *deembed*=False, *terminals\_rename*=True)[\[source\]](#)

Create a waveport taking the closest edges of two objects.

Parameters:

**signal**[str](#), [int](#), [list](#), [pyaedt.modeler.cad.object3d.Object3d](#) or

[pyaedt.modeler.elements3d.FacePrimitive](#) Main object for port creation or starting object for the integration line.

**reference**[int](#), [list](#) or [pyaedt.modeler.cad.object3d.Object3d](#)

Ending object for the integration line or reference for Terminal solution. Can be multiple objects.

**create\_port\_sheet**[bool](#), optional

Whether to create a port sheet or use given start\_object as port sheet.

**integration\_line**[int](#) or [pyaedt.application.Analysis.Analysis.AxisDir](#), optional

Position of the port. It should be one of the values for [Application.AxisDir](#), which are: XNeg, YNeg, ZNeg, XPos, YPos, and ZPos. The default is [Application.AxisDir.XNeg](#). It can also be a list of 2 points.

**port\_on\_plane**[bool](#), optional

Whether to create the source on the plane orthogonal to [AxisDir](#). The default is [True](#).

**impedance**[float](#), optional

Port impedance. The default is 50.

**name**[str](#), optional

Name of the port. The default is [None](#).

**renormalize**[bool](#), optional

Whether to renormalize the mode. The default is [True](#).

**deembed**float, optional

Deembed distance in millimeters. The default is 0, in which case deembed is disabled.

**terminals\_rename**bool, optional

Modify terminals name with the port name plus the terminal number. The default value is True.

Returns:

[pyaedt.modules.Boundary.BoundaryObject](#)

Port object.