

## OpenWay Riva Routing Node – Mesh Node:

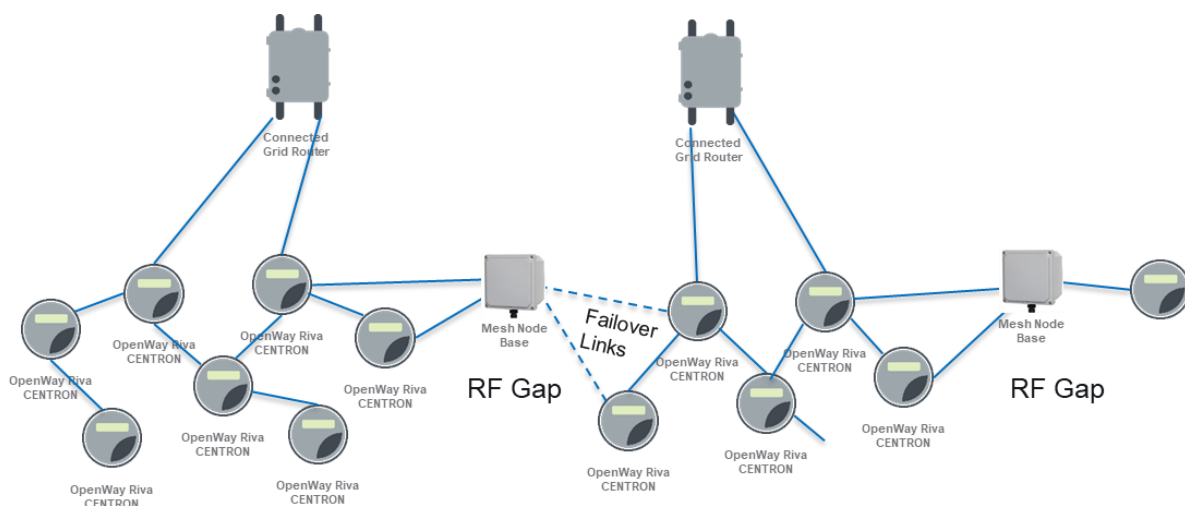
The OpenWay Riva Routing Nodes are a collection of network devices to augment the field area routers and ensure connectivity of the various end points within the OpenWay Riva solution. The Mesh Node provides for deployment of a pole or wall mounted device where the OpenWay Riva mesh network needs an additional node.

The Mesh Node addresses a number challenges within mesh network deployments;

- Strengthens the mesh network in areas where additional nodes are needed to ensure effective communications and network path resiliency
- Extends the reach of the mesh network by bridging gaps where RF signals cannot connect
- Provides a unique solution to Multi-Dwelling Units (MDU's) and other challenging RF environments by providing both RF (Radio Frequency) and PLC (Power Line Carrier) links to create highly reliable links into isolated meter rooms.

Key features of the Mesh Node include:

- » Simple, low cost, small footprint, low power consumption
- » Easy installation
- » Allows OpenWay Riva battery devices to join the network as leaf nodes to the Mesh Node
- » Secure two-way, encrypted connection to the CGR through the OpenWay Riva network
- » Acts as a meshing node to strengthen the OpenWay Riva network



**Mesh Node Base:**

This is a basic unit to provide RF + PLC links where needed within the OpenWay Riva mesh network. It has an integrated antenna and is available in either 120 VAC or 240 VAC versions.



**Electrical Specifications**

<b>AC powered Mesh Node Base</b>			
Power requirements	Voltage rating: 120V or 240 V		Operating voltage: $\pm 20\%$ (60 Hz)
	Frequency: $\pm 20\%$ (60 Hz)		Operating range: $\pm 3$ Hz
Operating environment	Temperature: $-40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$		
	Humidity: 0% to 95% non-condensing		
<b>Clock synchronization</b>			
Line synch	Power line frequency		
Crystal synch	$\pm 0.01\%$ at $25^{\circ}\text{C}$ , $\pm 0.25\%$ over the full temperature range		
<b>Power consumption</b>			
Mesh Node Base	VAC	Watt loss	VA loss
	120	3.48	7.58
	240		
<b>Regulatory, based on OpenWay Riva SmartNIC</b>			
FCC ID		SK9SNIC1	
Innovation, Science and Economic Development Canada (ISED) ID		864G-SNIC1	

**Physical Specifications**

The Mesh Node Base is contained in a lightweight, gray IP68 rated polycarbonate enclosure.

Dimensions, weight, and pallet weight	
L x W x H (in inches)	6.5 x 6.9 x 5.3
Weight (per Mesh Node Base)	2.1 lbs
Pallet weight	120 lbs (27 Mesh Node Base devices per pallet)

