## BIG Wireless Solar Dual Radio Mesh Router

## Key Features

802.11 WiFi based mesh and client radios for simple license free deployments
Multiple CoS queues for VoIP services
Automatic mesh routing/re-routing
Multi-day power supply with Solar Charging
Central status collection for network and power.

#### Radio Features

The mesh router includes two embedded field replaceable radios with auto power scaling. The power scaling takes into account current mesh radio signal strength from neighboring radios in order to reduce system power consumption.

Radio Technology 802.11bg

Radio power max 200mW/400mW

### Router/AP Features

The embedded router leverages an automatic mesh routing algorithm tuned to conserve bandwidth and yet provide rapid failover in the case of a peer failure. In addition, multiple class of service queues are available in order to differentiate services (such as VoIP from web traffic) for better overall system scalability and resiliency. The access point capabilities provide either locked user access, or portal based login infrastructure.

Mesh protocol modified AODV Gateway selection Shortest path

Service Classes 3

Guess Access Portal or Open

### Solar Features

The solar charge infrastructure is designed to provide flexible power support in areas with limited to no power infrastructure. The system scales from as little as a few hours of backup battery power for areas with central power distribution, to over a week of use with little to no charge current. Additional renewable energy sources can be used in areas where alternate power infrastructure is more appropriate.



## Management Integration

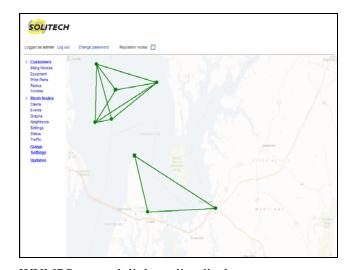
Central management is available via the Mesh User Management Portal System (MUMPS). This management tool set provides statistics for better system management and provisioning enhancements.

Bandwidth per radio/per link

Link quality per link
Throughput per link
Client access per router
Client associations per router
Battery status per router
Charge status per router

# System Provisioning

The mesh radio system is designed to be preprovisioned prior to field use. The mesh routing algorithms allow any radio to be deployed in any mode (gateway, client, or repeater) without needing to be pre configured prior to installation. Any additional configuration can be done via the central management infrastructure.



WUMPS network link quality display