

RURAL TELECOM

➤ CENTRAL REGION OF PERU



“TROJAN’S EXPERTISE IN AGM BATTERY TECHNOLOGY ENABLES CIME TO CONFIDENTLY DESIGN GILAT VSAT NETWORKS TO SERVICE THE RESIDENTS IN PERU. TROJAN’S DEEP-CYCLE BATTERIES PROVIDE IDEAL ENERGY STORAGE SOLUTIONS FOR VSATS OPERATING IN THESE ISOLATED REGIONS.”

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➤ LOCATION	➤ CHALLENGE	➤ SOLUTION	➤ OUTCOME
Central Region of Peru	To bring communication technology to rural, off-grid communities.	Battery-based solar system with Trojan AGM batteries.	Thousands of people in rural areas have access to reliable communications.



70 TROJAN AGM BATTERIES

35 OFF-GRID RURAL TELECOM NETWORKS POWERED

1,000+ PEOPLE SERVED

LOCATION

The Central Region of Peru is home to many rural, primarily agricultural areas with no access to the electrical grid or reliable communications.

CHALLENGE

In 2010, the government of Peru launched an initiative to encourage social and economic development in rural areas by bringing communications technology access to places where the grid does not reach. The initiative includes building and repairing broadband satellite networks, installing thousands of public phones, establishing Internet centers, and making television and radio more available via satellite.

SOLUTION

A battery-based, solar-powered system at 35 off-grid rural telecom networks was installed. Each standalone PV system includes three 85Wp SolarWorld modules, one Steca charge controller, one Victron Phoenix 12V inverter, and a 12V battery bank of 168Ah @ C100, consisting of two Trojan deep-cycle 24-AGM batteries connected in parallel.

Trojan's VRLA AGM batteries were chosen for their amp-hour capacity, physical size, availability, price, and required cycle life. Trojan's deep-cycle AGM batteries are ideal for renewable energy applications since they are designed for daily cycling and include robust thick plates that extend the batteries' life. In addition, maintenance-free VRLA batteries were selected for this project since ongoing system maintenance may be a challenge due to the VSAT's remote locations.

SYSTEM SPECIFICATIONS

- Batteries: (70) Trojan deep-cycle 24-AGM batteries
- Solar modules: SolarWorld 85W PV modules
- Inverter: Victron Phoenix 12V inverter
- Controller: Steca charge controller
- Racking: Mounted to tower
- Total Off-grid Networks, Installed: 35
- System Integrator: CIME Comercial S.A.

OUTCOME

The project helped bridge the digital divide and gave people in these rural areas access to communications and technology to stay informed, gain job skills, and communicate with people in other areas on a regular basis. This access to reliable communications has helped encourage and facilitate social and economic growth in the region.

BATTERY SOLUTION



- Amp-hour Capacity
- Long Cycle Life
- Maintenance Free



PARTNER



CIME COMERCIAL S.A.

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Trojan batteries are available worldwide and backed by outstanding technical support provided by full-time application engineers.

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