

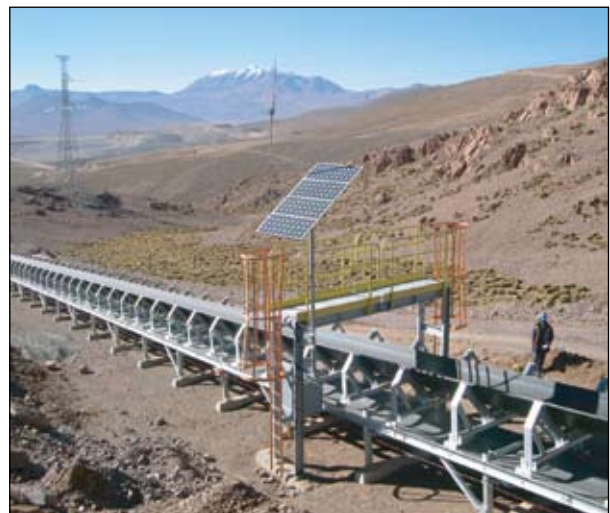
Energy

Matrix Energy Inc.

Stand-Alone Power Systems

Our autonomous power systems are an effective, proven and cost-effective means of supplying continuous DC or AC power in remote locations. Harvested solar energy is stored in batteries for continuous energy supply when and where needed. Of course, all of our systems are specifically suited to the unique climate in which they will operate.

Each system offers industry leading components including the solar array and mounting hardware that may be suited to any number of installation possibilities. Voltage regulator, batteries, circuit protection and surge suppression are all installed and pre-wired within a NEMA enclosure. Options include power and load breakers, inverters, rectifiers, lighting controllers, CSA , UL and Class 1 Division II certification.



Telemetry, Chili



Signalling, Canada



Applications >

www.matrixenergy.ca

- > Communications
- > WiMax
- > Railway Signals & Communcations
- > Security Systems
- > SCADA
- > Back-up power
- > Cathodic Protection
- > Navigational Aids
- > Telemetry
- > Lighting
- > Traffic Systems
- > Customized Systems



Telecommunications, Peru



Custom built equipment and battery enclosures

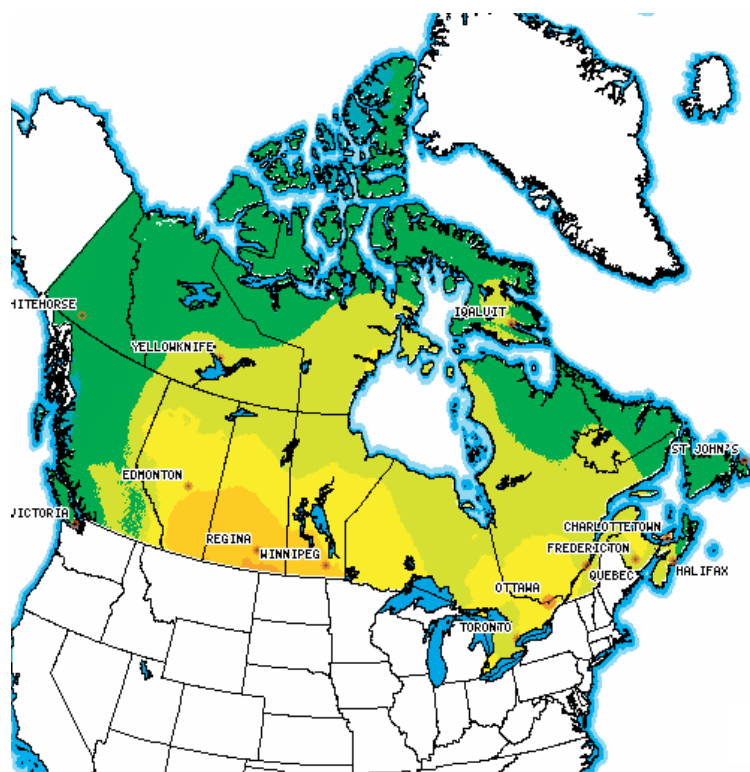
Standard packages are available.

Customized systems are the norm.

Hybrid systems are also available.

Canadian Solar Radiation Zones

(Average annual PV output potential of a south-facing solar array installed at Latitude+15°)



System Selection

1. Identify your location on the map shown here
(contact us for information on areas outside Canada)
2. Determine your average daily electrical load (Wh)
(to convert AC loads to DC, divide AC load (watts) by 0.80)
3. Find your average daily load (Wh) in the table below to determine the array and battery size you need and contact us for system details.
(Unable to locate yours in the table below? Contact Matrix for system sizing)

■ Zone 1
 ■ Zone 2
 ■ Zone 3
 ■ Zone 4
 ■ Zone 5

Typical average annual watt/hours output per day @ 12 VDC nom.							
Array (Wh)	Battery (Ah)	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Array (m ²)
50	100	212	190	170	156	147	0.40
80	200	300	265	252	227	219	0.65
100	200	395	350	333	302	290	0.80
160	300	591	522	496	447	431	1.30
240	400	786	697	663	601	577	1.95
320	500	968	858	816	740	711	2.60
400	600	1185	1050	999	906	870	3.25
480	700	1359	1201	1142	1029	992	3.90
560	800	1556	1379	1312	1190	1143	4.55