

CAPABILITY STATEMENT – SOLAR MONITORING SERVICES

“Our aim is to assist clients to generate power and income from sunshine through appropriate solar power developments”



For medium to large scale solar power stations, the process of developing the site from feasibility to operation is a multidisciplinary exercise.

Enhar supports solar project developers in Australia by providing

- Site prospecting for solar farm locations
- Feasibility studies and environmental impact assessments
- Solar monitoring
- Solar energy yield predictions and assessments
- Solar project array design and optimisation
- Quality, Health and Safety and Environmental plans
- Construction planning

Solar Resource Monitoring

Monitoring the solar resource is an important stage in proving the viability and confirming the expected energy yield and economic returns from a solar photovoltaic or solar thermal power station.

Enhar provides

- Global Solar Radiation monitoring: for fixed-angle solar power arrays
- Direct radiation monitoring: for tracking and focusing solar power technologies including solar thermal mirror and tracking photovoltaic
- Full service – you tell us your site, we install the equipment, record the data and provide you the final solar resource analysis



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Enhar is a renewable energy and energy conservation company based in Melbourne. Enhar advises clients on renewable energy project development and energy conservation opportunities. Our team is qualified in engineering disciplines and physical sciences.

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Full weather station with solar monitoring

We can supply, install and monitor a Davis Instruments weather station. This includes a global solar radiation sensor, as part of a full weather station also measuring rainfall, pressure, humidity, temperature, wind speed and direction.



Price for 6 months of solar and weather monitoring:

- \$7,000+GST

This includes all equipment, delivery to site, installation labour, ongoing data collection, cleaning and monitoring.

For remote stations, or where you want dial-in access to your own data, we can supply a GSM modem dial-in facility for an additional \$2,000

The accuracy of this solar radiation

sensor is +/-5% , resolution is 1W/m²

Fixed angle: Global Solar Radiation

Enhar can supply and install a system to measure the global and diffuse solar radiation using quality instruments.

Price range for solar global solar radiation monitoring :

- \$4,000-\$6,000+GST (6 months)
- \$6,000-\$8,000+GST (12 months)

For instruments meeting WMO meteorological standards, an additional \$2,500 applies to the above prices.

Tracking Solar Technologies

Solar thermal power stations focus Direct Normal Incident radiation to optimize energy capture.

The SPN1 from Delta-T measures global and diffuse irradiation, and can also be used to compute direct beam radiation without a tracking system.



Price for 6 months of monitoring global and diffuse solar radiation with SPN1:

- \$11,000+GST

The accuracy of this system is +/- 5%, resolution is 0.6W/m²

Direct Normal Incident (DNI) beam can be measured directly using more advanced monitoring systems.

A 'pyrheliometers' mounted on a tracking system is available for resource assessments for tracking solar technologies:

Price ranges are \$10-20,000 +GST for 6 months of monitoring, or \$15,-\$25,000 for 12 months of monitoring.

Prices are for sites within 100km of Melbourne, Victoria. Each additional 100km distance attracts 10% surcharge to allow for travel time during data collection.

