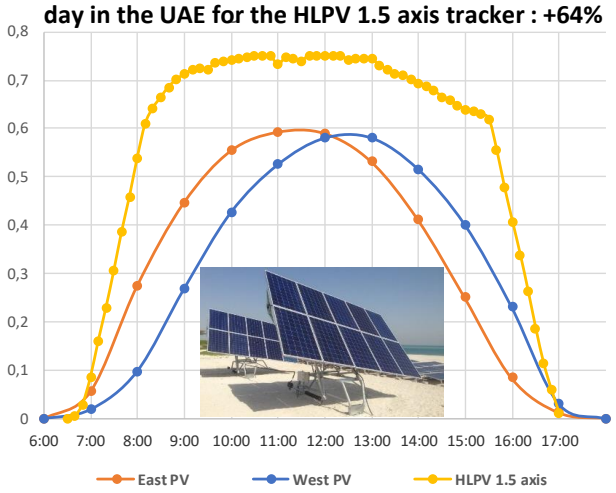
THE NEXT GENERATION OF PV TRACKERS FOR LOWER LCOE

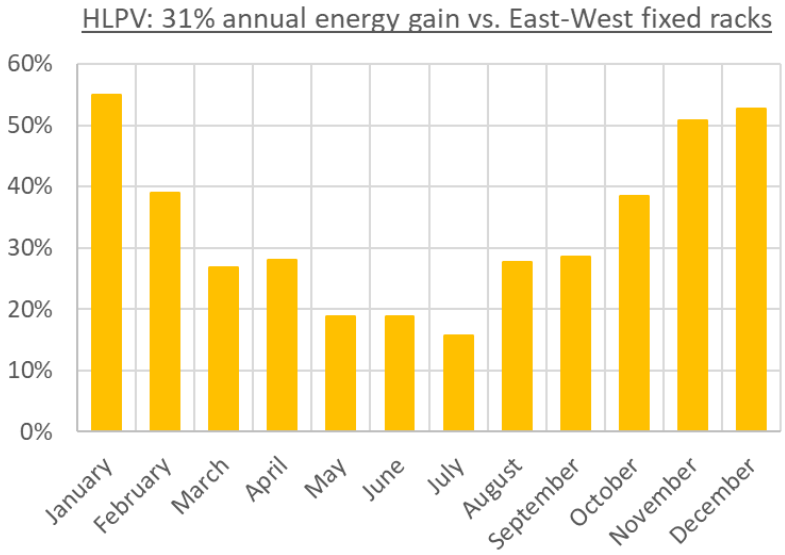
Measured energy gain during a clear sky winter day in the UAE for the HLPV 1.5 axis tracker : +64%

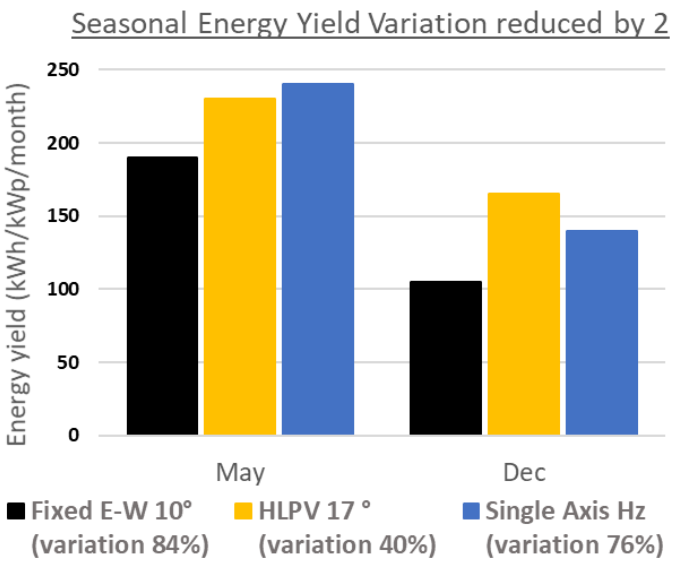


System description

Tracker type	1.5 axis variable tilt and roll tracker for PV panels
Modules & power per tracker	Standard or bifacial 400-500 Wc PV modules : 4 to +6 kWp per tracker
Tracking range	Tilt: 5 to 20°, Roll: -46° to +46°
Control system	Astronomical tracking with backtracking, SCADA control system, real-time performance monitoring of solar plant including preventive maintenance
Drive system	Electric linear actuator
Structure	Hot-dip galvanized steel structure, maintenance-free bushings
Dimensions	Module frame L=7m, W=3.2 to 4m; Maximum system height < 4m
Maximum wind speed	Up to 110 km/h (10min average) & 175 km/h (3s gust) measured at 10m
Codes & standards	Eurocodes 1, IEC 62817, CE (pending)
Warranty	Full system warranty

United Arab Emirates: Energy yield gain & Seasonal variation





About HeliosLite

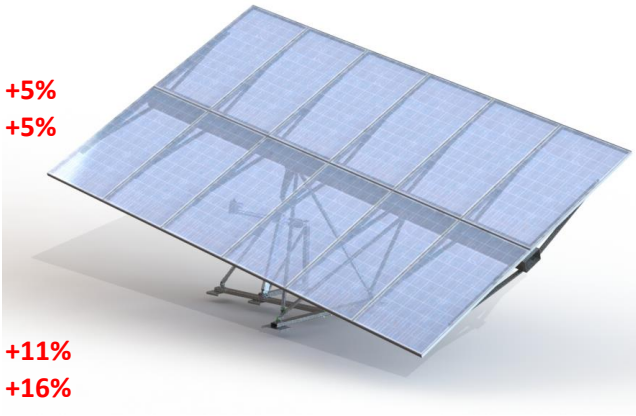
HeliosLite designs integrated tracking systems for higher performance and reliability. International patent pending. Manufacturing and on-site services available on request. www.helioslite.com

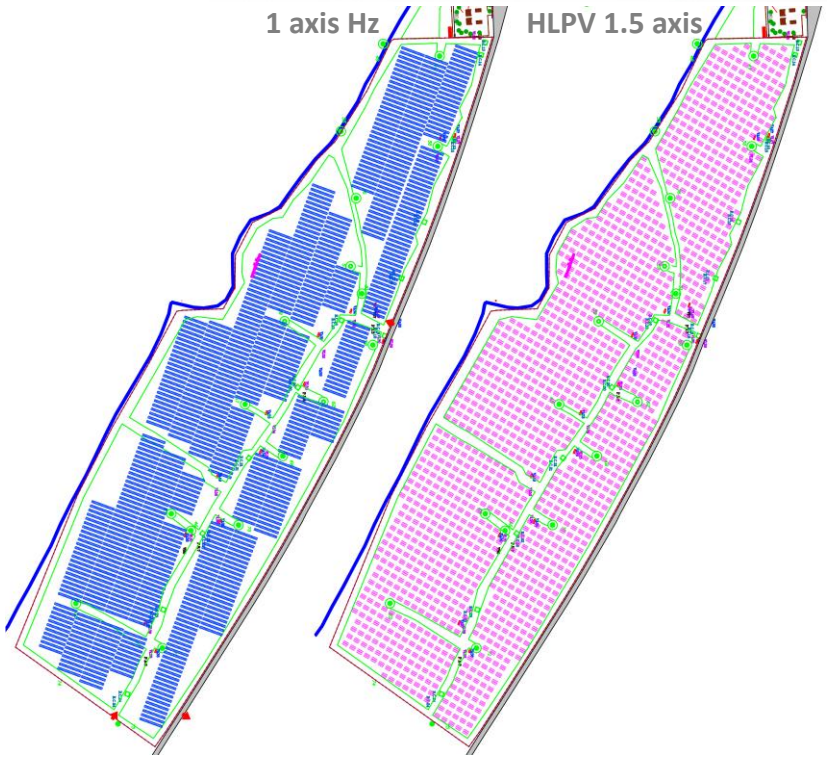
HELIOSLITE

THE NEXT GENERATION OF PV TRACKERS FOR THE LOWEST LCOE

HLPV 1.5 axis tracker: The most cost effective solution for challenging sites

Tracker type	1 axis Hz	1.5 axis HLPV	Gain
Power per module (W)	275	275	
Number of trackers installed	703	1230	
Nb of modules per tracker table	20	12	
Total nb of PV modules installed	14060	14760	+5%
Plant installed power (MW)	3.87	4.06	+5%
Total land area (m²)	90032	90032	
Tracker ground coverage ratio (%)	42%	34%	
Effective ground coverage ratio (%)	26%	27%	
Installed power density (W/m²)	42.9	45.1	
Installed power density (kW/hectare)	429	451	
Energy yield France (kWh/kWp/year)	1259	1392	+11%
Annual energy output (MWh/year)	4.9	5.6	+16%





Distinctive features

- Cost effective design delivering higher power output than single axis trackers
- Highly adaptable: slopes & irregular Terrains, modular & movable structures
- Simple and fast installation requiring no lifting equipment
- Optional self-powered control system with battery backup
- Wind resistance verified by a certified wind tunnel test
- Mechanical design highly resistance to dust and sand with no open-gear drive

Compatible with all modules and PV technologies (including bifacial)