

lightweight
low cost
elegantly simple



Whitfield**Solar**



data sheet

WS-Si24 CONCENTRATOR PANEL

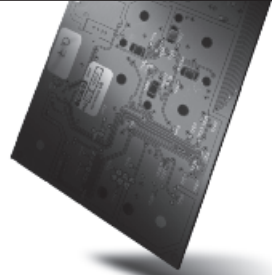
General description

A 2-axis concentrator using monocrystalline silicon cells with 70x solar concentration. Each panel comprises a rectangular frame with a dedicated sensing and tracking system, 24 power troughs, each containing 12 series connected cells with individual diode protection.

Physical characteristics

FRAME LENGTH	3.6m
FRAME WIDTH	1.3m
UNIT HEIGHT (Typical max)	2.1m
PANEL WEIGHT	67kg





Electrical characteristics

Operating Conditions:	1000Wm ⁻² DNI 25°C, AM1.5	850Wm ⁻² DNI 25°C, AM1.5	850Wm ⁻² DNI 60°C, AM1.5
<i>NOTES: +/- 5% variation in data should be allowed</i>	<i>For Comparison</i>	<i>Standard Test Conditions</i>	<i>Good Operating Conditions</i>
MAXIMUM POWER	420W	360W	312W
MAXIMUM CURRENT	5.4A	4.7A	4.8A
MAXIMUM OPEN CIRCUIT VOLTAGE (at -20°C)	-	118V	118V
V _{pp} (Voltage at peak power)	-	78V	67V
I _{pp} (Current at peak power)	-	4.6A	4.65A
OPERATING CELL TEMPERATURE	25°C	25°C	60°C
MAX SYSTEM VOLTAGE	625V		

Output characteristics

ENERGY YIELD (Site Dependent)	SEVILLE	MIAMI	CAIRO
WS-Si24 UNITS (kWh/kWp)	1290*	1310*	1671*
NORMAL SI PV PANELS (fixed at the latitude angle, for comparison)	1175*	1253*	1379*

* Yield can vary from year to year. These data are based on 30 year direct insolation averages and assumes collectors in large field arrays with 10% self-shading losses.

Installation advantages

ROOF-TOP MOUNTED

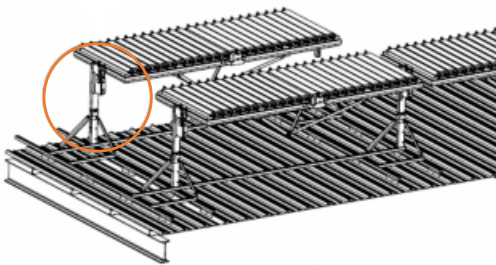
SIMPLE INSTALLATION

LOW-WEIGHT (60% WEIGHT OF PV MODULES)

LOW-PROFILE (REDUCED WIND-LOADING)

FOLLOWS EXISTING BUILDING LINES *

MARKET-LEADING FULLY-INSTALLED COST



GROUND MOUNTED – SOLAR ‘FARM’

FAST, EASY INSTALLATION

FRAME AND TRACKING INTEGRATED

NO SITE-POURED CONCRETE

SMALL, UNOBTRUSIVE UNITS

LOWEST FULLY INSTALLED COST

* Delivers close to max output in any orientation – does not need to ‘face south’



Maintenance & warranties

VANDAL TOLERANT DUE TO HIGH DEGREE OF MODULARITY

CASSETTE APPROACH TO FIELD INSTALLABLE COMPONENTS

CLEANING REGIMES SIMILAR TO FLAT-PLATE

TRACKER / FRAME: 5 YEAR LIMITED WARRANTY

POWER TROUGH: 20 YEAR LIMITED WARRANTY

www.whitfieldsolar.com

Telephone: +44 (0)118 926 4000

Fax: +44 (0)118 926 4002

Email: office@whitfieldsolar.com

For sales enquiries: sales@whitfieldsolar.com

Whitfield Solar Ltd
Webb's Court, 8 Holmes Road
Earley, Reading, Berks, RG6 7BH
United Kingdom

