

EnergyEfficient

EcoLogical

SolarPowered

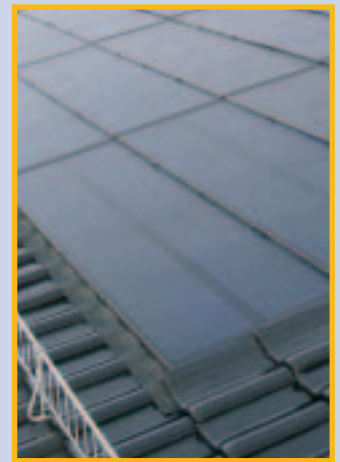
BIOSOL XXL

THE state-of-the-art solar power roofing system for large surfaces on farm, industry and tradebuildings!

For roof integration

UNI-SOLAR® laminates with thin film cells based on triple junction technology
Solrif XXL-frame with black coated aluminium sections
Mounting with special stainless steel brackets
Advantages of the system: efficient use of diffuse solar radiation in spite of low roof angles and unfavourable orientations

- for roof reconstructions or new roofing
- makes use of existing substructures
- easy laying on fibre cement, bitumen, corrugated siding etc.
- long-lasting due to use of top quality materials
- customisable to any form of roof
- triple junction technology guarantees optimal yield
- the MultiContact connector provides secure and simple currant linkage
- ideally combines weather protection, great design and ecological power generation
- quick amortisation through statutory payments for feeding in
- high additional benefits - high rate of return
- homogeneous appearance of the modul field



www.biohaus.de

BIOSOL XXL

Electrical data*

| | | |
|--|-------|------|
| Modul Class / Nominal Power (P _{MPP}) | 127 | Wp |
| Nominal Voltage (U _{MPP}) | 30.2 | V |
| Nominal Current (I _{MPP}) | 4.2 | A |
| Open Circuit (U _{OC}) | 42.2 | V |
| Short Circuit (I _{SC}) | 5.2 | A |
| Temperature Coefficient of P _{MPP} (ΔP _{MPP}) | -0.27 | W/K |
| Temperature Coefficient of U _{MPP} (ΔU _{MPP}) | -94 | mV/K |
| Temperature Coefficient of I _{MPP} (ΔI _{MPP}) | 4.2 | mA/K |
| Temperature Coefficient of U _{OC} (ΔU _{OC}) | -160 | mV/K |
| Temperature Coefficient of I _{SC} (ΔI _{SC}) | 5.2 | mA/K |
| NOCT (800 W/m ² , AM 1.5, 20°C) | 45 | °C |

*at standard test conditions (1000 W/m², Spectrum AM 1.5, Celltemperature 25°C). During the first 8-10 weeks of operation, electrical output exceeds specified rating may be higher: Power P_{MPP} +15%, Open Voltage U_{OC} +11%, Short Circuit I_{SC} +4%.

Dimensions and weight data

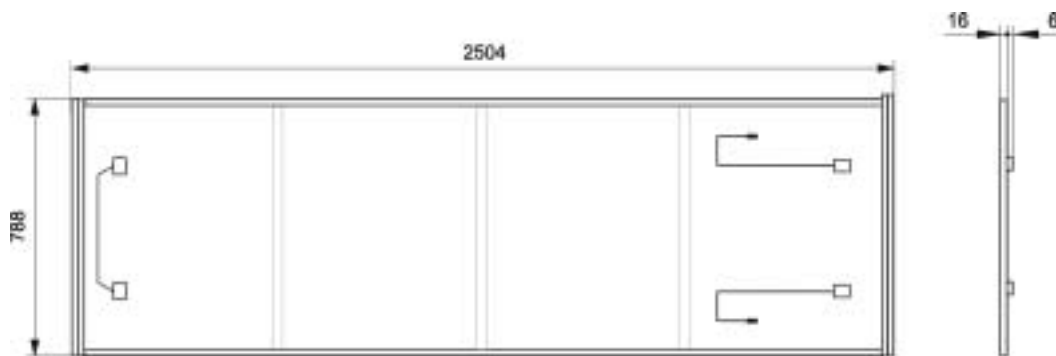
| | | |
|----------------------------|------------|---------|
| Length | 2504 | mm |
| Width | 788 | mm |
| Height (with junction box) | 16 (22) | mm |
| Misplacing Measure | 2485 x 771 | mm x mm |
| Weight | 17.5 | kg |

Quality features

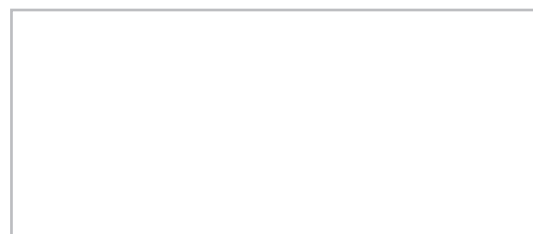
| | |
|------------------------------|---|
| Tolerance of Nominal Power | +/- 5% |
| Guarantee | 20 years to 80% of rated nominal power |
| Product guarantee | 5 years |
| Max. System Voltage | 1000 V |
| Qualifications TÜV Rheinland | IEC 61646 load test 10.16, safty class II |

Construction features

| | |
|------------------|--|
| Solar Cell | 20 amorphe silicon trijel-junction cells, United Solar |
| Bypass Diodes | two Schottky Diodes across every cell |
| Frontside | highly transparent ETFE-Polymer (TEFZEL®) |
| Backside | Galvalum plate |
| Frame | Aluminium, black coated, system SOLRIF XXL |
| Junction Box | two quick connects, Type of protection IP65 |
| Connection Cable | 2 x 0.5 m, MultiContact MC 3 system |



module order crossways



specifications subjects to change without notice - 05/2007



BIOHAUS PV Handels GmbH
 Otto-Stadler-Str. 23c
 D-33100 Paderborn
 Tel. +49 5251-500500
 Fax +49 5251-50050-10
 pv@biohaus.de