

PV Slate Range of Products

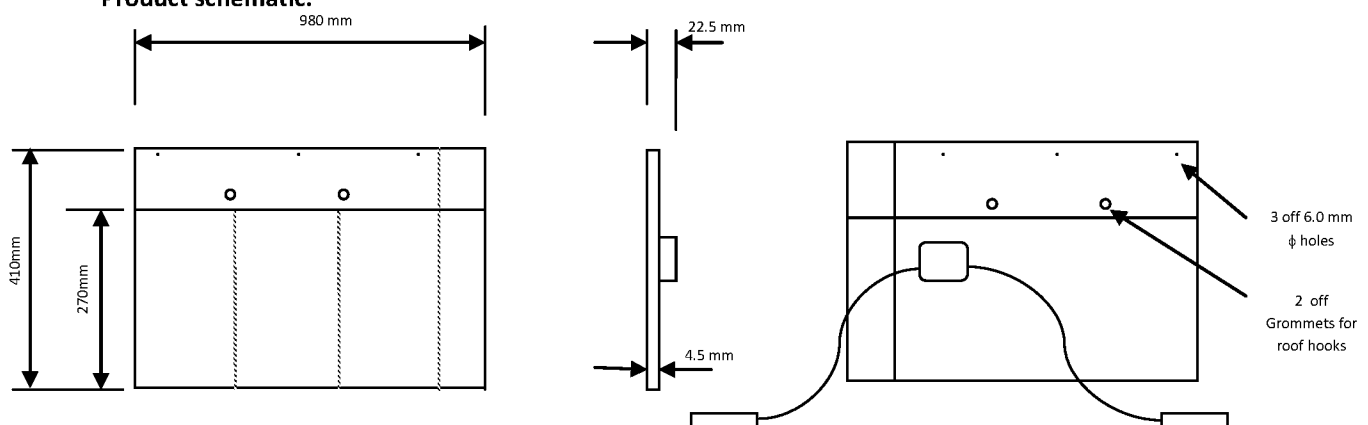
The PV Slate is a photovoltaic unit that visually emulates a row of 3 standard 24" x 12" (600 mm x 300 mm) 'Duchess' roofing slates. . The 'Traditional' product has a very good colour match to traditional 'blue', 'grey' and 'black' slate grades. The 'Contemporary' product provides a lapped appearance but with a more modern look. The 'Terracotta' product matches better with clay tile type roofs.¹ All are installed using three stainless steel screws through preprepared holes along the top edge of the unit and two stainless steel roof hooks at the bottom edge of the slate, on a 270 mm batten gauge.

The product is designed to be linked together electrically in a series of 'strings' to feed DC electrical power into a suitable inverter for either on-site consumption or export.

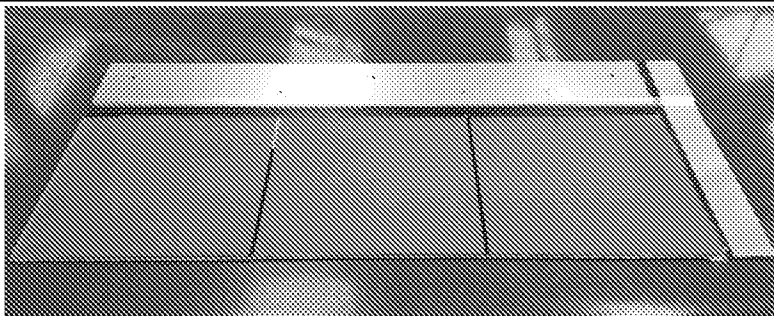
Product: PV Slate 'Traditional' product installed in a slate roof



Product schematic:



¹ Roofing slate is a natural product that varies in appearance according to both origin and weather exposure, so exact colour matching is impossible to guarantee, however please contact GB-Sol Limited for recommended materials and slate selection to achieve the best colour alignment.



Product specifications:

Nominal Dimensions (L x W x T)	980 mm x 410 mm x 4.5 mm
Connectors	Multi-contact connectors MC4 type 1.0 m fly leads
Junction box	Low profile junction box
Slate weight (individual product)	3.5 Kg
Slate product packaging	Standard palletised carton containing 25 Carton dimensions 1000mm (L) x 800 mm (W) x 450 mm (H) plus Euro pallet Packed weight 125 Kg (including pallet)
Roof mounting method	Using stainless steel fixing screws: - 3 off M5 x 25 mm A2 pan head wood screws - 2 off Roof Hooks 2.7mm 316 St steel black powder coated - 2 x Rubber Grommets assembled to panel Batten gauge 270 mm
Minimum roof angle (When applied in accordance with BS5534:2014)	22° - with a functional weatherproof sub-roof system
29 PV Slates per KiloWatt	Roof coverage per KiloWatt 7M ² ("traditional" product)

Electrical Data:

PV Slate Product	Traditional	Contemporary	Terracotta
Nominal output at STC (P _{max} MPP)	35 Wp. (+/-10%)	40 Wp. (+/-10%)	35 Wp. (+/-10%)
Short Circuit Current - I _{sc}	5.05 A	5.77 A	5.05 A
Open Circuit Voltage - V _{oc}	7.76 V	7.76 V	7.76 V
Current at MPP	4.78A	5.46A	4.78A
Voltage at MPP	6.2V	6.2V	6.2V
Temperature coefficient of power	-0.40 %/K	-0.40 %/K	-0.40 %/K
Temperature coefficient of Voltage - V _{oc}	-0.32 %/K	-0.32 %/K	-0.32 %/K
Temperature coefficient of current- I _{sc}	0.042 %/K	0.042 %/K	0.042 %/K
Maximum permissible system voltage - V _{MAX}	600 V	600 V	600 V



Note: Under normal conditions, a photovoltaic unit is likely to experience conditions that produce more current and /or voltage than reported at standard test conditions. Accordingly the values of I_{sc} and V_{oc} specified for this product should be multiplied by a factor of 1.25 when determining component voltage ratings, conductor ratings, fuse sizes and size of controls connected to the PV output.

Note: PV Slate is not feed-in tariff eligible

Maintenance: Self cleaning due to roof pitch. Roof access via padded ladders only - no access during earth faults.

Warranty: The PV Slate has a 10 year product and power performance warranty.
Power performance warranted as a minimum of 80% of initial estimated output after 10 years