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Datasheet

Solar Panel Kit for Battery Plus (2024) Datasheet

Overview

Description

The 80 W solar panel is specially selected to meet the Battery Plus system requirements, making it the ideal accessory for green solutions in remote areas. It is based on monocrystalline solar cells and has an expected life of more than 25 years.

With the included mounting kit, you can build and power an off-grid deployment scenario. By combining the **WisGate Edge Pro** or **WisGate Edge Prime** gateway with the **Battery Plus** and the **Solar Panel**, you can have reliable network coverage without power loss.

Features

- Peak power: 80 W
- Open circuit voltage (V_{oc}): 24.4 V
- Max. power voltage (V_{mp}): 20.5 V
- Max. power current (I_{mp}): 3.90 A
- Dimensions: 795 x 580 x 30 mm
- Operating temperature: -40° C to $+85^{\circ}$ C

Specifications

Overview

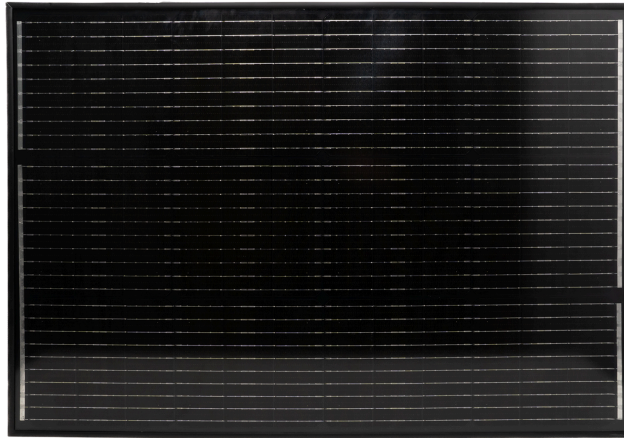


Figure 1:

Parameter	Value
Dimensions (lwh)	795 x 580 x 30 mm
Solar cell type	Monocrystalline Silicon
No. of cells	36
Front cover	Material: Low-Iron Tempered Glass Thickness: 3.2 mm
Encapsulant	Material: Ethylene Vinyl Acetate (EVA)
Frame	Material: Anodized Aluminum Alloy Color: Black
Junction box protection degree	IP67

Hardware

Electrical Characteristics

Parameter	Value
Model	S-80 W
Peak power (Pm)	80 W ($\pm 5\%$)
Open circuit voltage (Voc)	24.4 V

Parameter	Value
Max. power voltage (Vmp)	20.5 V
Max. power current (Imp)	3.90 A
Short circuit current (Isc)	4.21 A
Standard test conditions	Cell temperature: 25° C Irradiance: 1000 W/m2 Standard solar spectral distribution: AM1.5
Coefficient current TK	0.08% / °C
Coefficient voltage TK	-0.37% / °C
Coefficient power TK	-0.43% / °C

Mechanical Characteristics

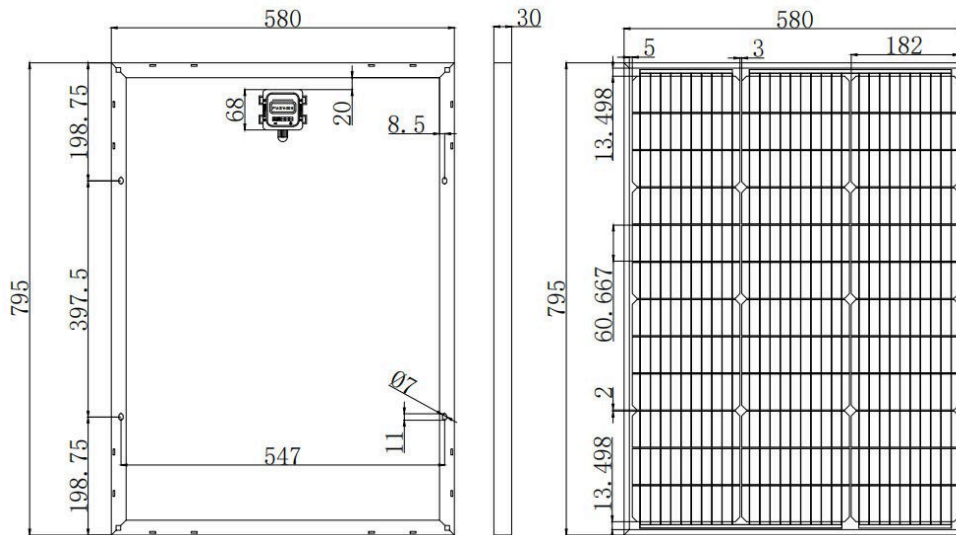


Figure 2: Solar Panel Dimensions

Environment Characteristics

Parameter	Value
Max. static load, front (snow/wind)	2400 Pa
Max. static load, back (wind)	2400 Pa

Parameter	Value
Max. hailstone impact (diameter/velocity)	25 mm / 23 m/s
Operating temperature	-40° C to +85° C

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