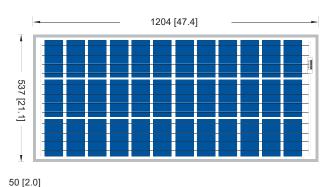


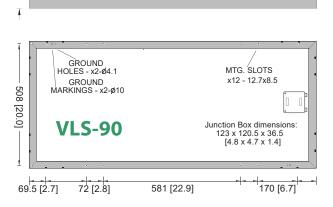
Value Line Series (VLS) 90W/100W Panel - VLS-90 and VLS-100C

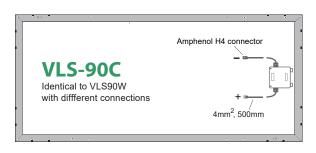
The Value Line Series (VLS) family of solar modules, offered by Ameresco Solar, is a reliable, rugged, and economic panel engineered for off-grid solar applications.



DIMENSIONS







Dimensions in mm [in].

Electrical characteristics

	(1) STC 1000W/m ²	(2) NOCT 800W/m ²
Maximum power (P _{max})	90W / 100W	65W / 72W
Voltage at $P_{max}(V_{mpp})$	18.9V / 19.2V	16.9V / 17.1V
Current at P _{max} (I _{mpp})	4.8A / 5.2A	3.8A / 4.2A
Short circuit current (I _{sc})	5.0A / 5.6A	4.1A / 4.6
Open circuit voltage (V _{oc})	22.3V / 22.8	20.2V / 20.6V

Efficiency reduction at 200W/m² <5% reduction (efficiency 13.2%)

1: Values at Standard Test Conditions (STC): 1000W/m² irradiance, AM1.5 solar spectrum and 25°C module temperature 2: Values at 800W/m² irradiance, Nominal Operation Cell Temperature (NOCT) and AM1.5 solar spectrum 3: Nominal Operation Cell Temperature: Module operation temperature at 800W/m² irradiance, 20°C air temperature. 1m/s wind speed

Mechanical characteristics

Solar cells 36 crystalline silicon cells in series
Front cover High transmission 3.2mm (1/8th in) glass

Encapsulant EVA

Back cover White polyester

Frame Silver anodized aluminum

Diodes Two Schottky bypass diode included

Junction box IP65 with 4 terminal screw connection block; accepts PG 13.5, M20 13mm (1/2") conduit, or cable fittings

Cable (-C) 500mm, PV1-F/PV Wire, 4mm2/12AWG,DO:6±0.2mm

Connector (-C) Amphenol H4

Dimensions 1204 x 537 x 50mm / 47.4 x 21.1 x 2in

Weight 7.7kg / 17lbs

All dimensional tolerances within ±1% unless otherwise stated.

Warranty*

- ▶ Free from defects in materials and workmanship for 2 years
- ▶ 90% minimum power output over 10 years

Certification

ISO 9001

ISO 9001 factory certification ensures that our manufacturing facilities use proven manufacturing and quality control processes.

^{*} Refer to warranty document for terms and conditions.