# ■■■ SOLAR INNOVATION



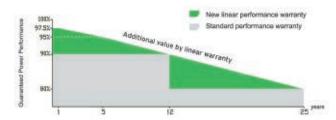
Produced by SOLVIS d.o.o.

# GermanPV-module »poly high performance«

- Modules with high degree of efficiency up to 17,21 %
- High efficiency at low light conditions with superior transmission properties
- Anti-reflective coating improves light absorption and reduces surface dust
- Particularly stable tested planar pressureload of 5,400 N/m<sup>2</sup>

- Suitable for extreme climatic conditions
- High salt mist and ammonia resistance
- Up to 4.9 W more module power
- Free of potential induced degradation (PID-free) = higher performance stability
- 5-busbar technology

### Linear performance warranty



Type:

GPV280P-60

















GermanPV GmbH Am Gleis 3 D-03042 Cottbus Tel. +49 (0)355 289 132-70 Fax +49 (0)355 289 132-99 **GermanPV GmbH** Unterwanger Str. 3 D-87439 Kempten Tel. +49 (0)831 565 847-20 Fax +49 (0)831 565 847-23

info@germanpv.com www.germanpv.com

#### **Mechanical Characteristics**

Cell Type: Poly-crystalline 156 x 156 mm (6 inch)

No. of cells: 60 (6 x 10)

Dimensions: 1,640 x 992 x 40 mm

Weight: 18.3 kg

Front Glass: 3.2 mm, High Transmission,

Low Iron, Tempered Glass

Frame: Anodized Aluminium Alloy, RAL 9005

Junction Box: IP67 rated

Output Cables: Length 1000 mm, 4.0 mm<sup>2</sup>

Unit pressure: max. 5,400 N/m<sup>2</sup>

#### Technical data

Module Type	GPV280P-60
Maximum Power at STC (Pmax)	280Wp
Maximum Power Voltage Umpp	31,0 V
Maximum Power Current Impp	9,07 A
Open-circuit Voltage (Voc)	38,0 V
Short-circuit Current (Isc)	9,76 A
Module Efficiency (%)	17,21 %
Operating Temperature (°C)	-40 °C till +85 °C
Maximum system voltage	1,000 V
Power tolerance	0 % till 4.9 %
Temperature coefficients of Pmax	-0.41 %/°C
Temperature coefficients of Voc	-0.31 %/°C
Temperature coefficients of Isc	0.05 %/°C
Nominal operating cell temperature (NOCT)	20 °C

GermanPV-modules are produced according to the well-proven glass-foil method of production. The back-mounted composite film and the complete edge sealing vouchsafe the high quality of the laminate structure. This guarantees an extremely long life cycle and a higher performance stability. The fully automated production process provides for a continuously high product quality of the photovoltaic modules which results in a maximum degree of efficiency per module of 17,21 %.

#### Qualification | Certification

These special-made laminates are certified by IEC EN 61215, IEC EN 61730-1 and IEC EN 61730-2. A free of charge withdrawal and professional disposal will be guaranteed.

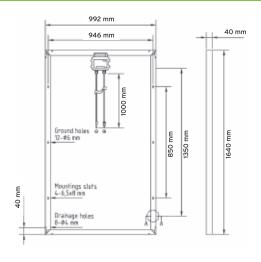
# Quality | Reliability

The production site has been certified by the TÜV Nord according to ISO 9001/2008, ISO 14001/2004, OHSAS18001/2007, CE, PV CYCLE and MCS. The modules will be produced exclusively for the GermanPV GmbH by the solar global corporation SOLVIS d.o.o.

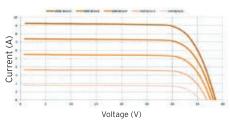
## Warranty for modules ensured by SOLVIS d.o.o.

- · 25 years linearely performance warranty with a maximum 20 % drop in performance
- · 10 years product warranty

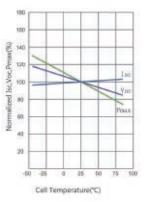
The guarantee conditions of the SOLVIS d.o.o. are valid.







#### Temperature Dependence of Isc.Voc.Pmax



Delivery with solar power supply cords (socket and connector system), length: 1000 mm

STB: All details regarding electric data apply to vertical irradiation at 1,000 W/m² and a temperature of 25 °C (normal conditions with AM = 1.5).