VDS POWER

VDS-S110/M12H

545-555W

210mm cells half cut cell technology

Artikel-Nr.: 555-04.2022-R35-C350

21.2%	555W	12 YEARS	25 YEARS
Module Efficiency	Highest Power Output	Material & Workmanship Warranty	Linear Power Warranty

-2.00% First year power degradation **-0.55%** Annual degradation

PRODUCT ADVANTAGES

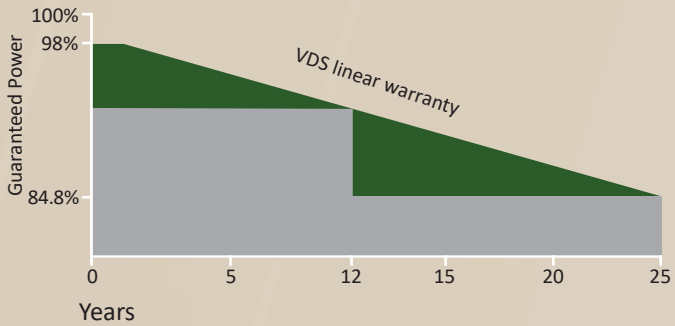
High customer value
- Lower LCOE (Levelized Cost Of Energy), reduced BOS (Balance Of System) cost, shorter payback time
- Designed for compatibility with exisiting mainstream system components
- Lower guaranteed first year and annual degradation
- Higher return on Investment

High power up to 555W
- Large area cells based on 210 mm silicon wafers and half-cut cell technology
- Up to 21.2% module efficiency with high density interconnect technology
- Multi-busbar technology for better light trapping effect, lower series resistance and improved current collection

High reliability
- Minimized micro-cracks with innovative non-destructive cutting technology
- Ensured PID resistance through cell process and module material control
- Resistant to harsh environments such as salt, ammonia, sand, high temperature and high humidity areas
- Mechanical performance up to 5400 Pa positive load and 2400 Pa negative load

High energy yield
- Excellent IAM (Incident Angle Modifier) and low irradiation performance, validated by 3rd party certifications
- The unique design provides optimized energy production under inter-row shading conditions

PERFORMANCE WARRANTY



Standard linear power guarantee

VDS linear power guarantee

Certifications of Product and Manufacturer

VDS POWER GMBH
KUHWASEN 3, 72355 SCHÖMBERG, GERMANY

www.vdspower.de

VDS-S110/M12H-xxx

ELECTRICAL DATA (STC)

Peak Power Watts-PMAX (Wp)*	545	550	555
Maximum Power Voltage-Vmpp (V)	31.4	31.6	31.8
Maximum Power Current-Impp (A)	17.37	17.40	17.45
Open Circuit Voltage-Voc (V)	37.7	37.9	38.1
Short Circuit Current-Isc (A)	18.47	18.52	18.56
Module Efficiency ηm (%)	20.9	21.0	21.2
Power Tolerance (W)		0~+5	

STC: Irradiance 1000W/m², moudule temperature 25°C, AM=1.5; *Measuring tolerance: ±3%

ELECTRICAL DATA (NMOT)

Maximum Power-PMAX (Wp)	413	417	420
Maximum Power Voltage-Vmpp (V)	29.2	29.3	29.5
Maximum Power Current-Impp (A)	14.15	14.19	14.23
Open Circuit Voltage-Voc (V)	35.5	35.7	35.9
Short Circuit Current-Isc (A)	14.88	14.92	14.96

NMOT: Irradiance 800W/m², ambient temperature 20°C, AM=1.5, wind speed 1m/s

MECHANICAL DATA

Solar Cells	Monocrystalline
No. of Cells	210x105 mm 110 pcs
Module Dimensions	2384*1096*35 mm
Weight	28.6 kg
Glass	3.2 mm, High Transmission, AR Coated Heat Strengthened Glass
Encapsulant Material	EVA
Backsheet	White
Frame	35 mm Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0 mm² Cable length 350 mm or customized length
Connector	MC4 Compatible

TEMPERATURE RATINGS

NMOT (Nominal Module Operating Temperature)	43°C (±2°C)
Temperature Coefficient of Pmax	-0.34%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.040%/°C

(Do not connect Fuse in Combiner Box with two or more strings in parallel connection)

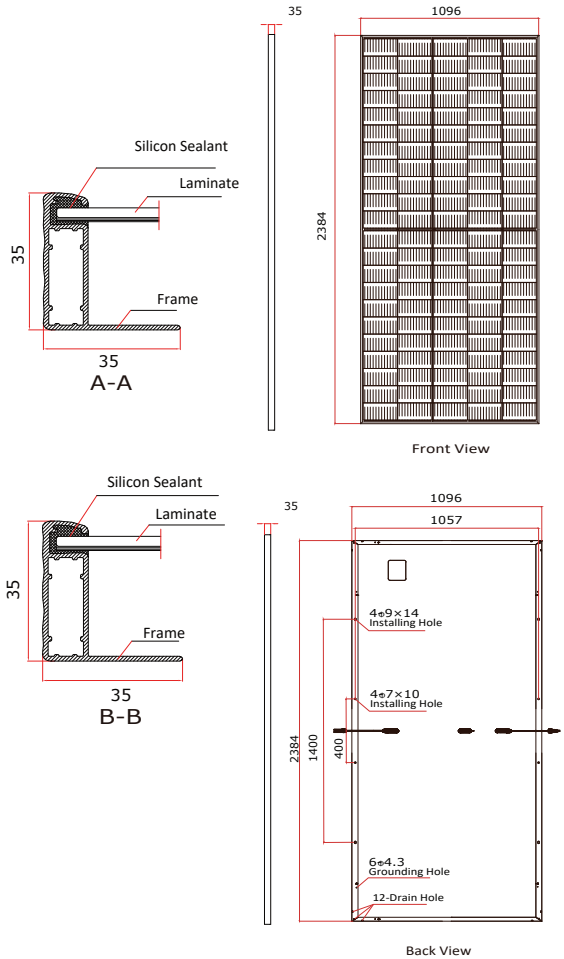
MAXIMUM RATINGS

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC (IEC)
Max Series Fuse Rating	30A

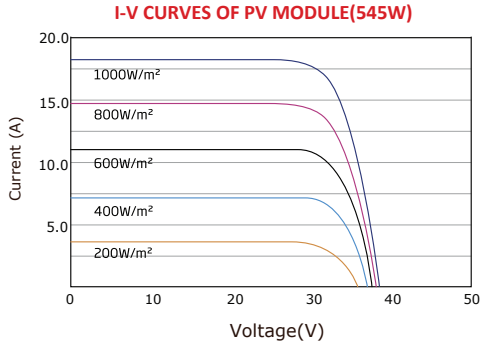
PACKAGING CONFIGURATION

Modules per box	31 pieces
Modules per 40'container	620 pieces

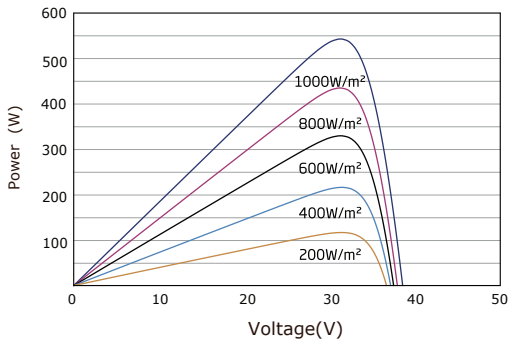
DIMENSIONS OF PV MODULE(mm)



I-V CURVES OF PV MODULE(545W)



P-V CURVES OF PV MODULE(545W)



COMPANY PROFILE

VDS-Power is a German-based company with strong expertise in providing Photovoltaic solution globally. Our management team has been focused in European market for more than 10 years. We have satisfied customers in Germany, Spain, Italy, Bulgarian and many other European countries. Through direct access to production, we control the quality of photovoltaic modules by monitoring and documents the manufacturing processes from material procurement to final testing. With a warehouse in Rotterdam we ensures fast delivery within EU. This enables us to quickly meet the needs of different purchase quantities. We attach great importance to a reliable partnership and cooperation with our customers. We value reliability, commitment, security and transparency.