

# GOLDI DUO APEX\_144GN

## Polycrystalline Module

### Key Features

- Excellent module conversion efficiency of up to 17.21%.
- Up to +3% positive power output guaranteed.
- About 4wp extra power gain per modules .
- Reducing equipment loss increases the power generation in overall system.
- High fill factor & four times lower loss in complete module.
- Split junction boxes reduce panel temperature resulting increased reliability.
- Improved performance in shade condition.
- Loss minimization due to excellent temperature co-efficient.
- BOS cost reduction for 1500 VDC system by connecting more modules in a string.
- Better performance even at low irradiance condition
- Higher specific yield.

### Quality & Reliability

- Manufactured in an ISO 9001:2015, ISO 14001:2015, OHSAS 18001:2007 certified facility.
- Manufactured using high grade raw materials from reputed international suppliers adopting a stringent quality criteria.
- PID resistant (IEC 62804).
- Salt mist resistant (IEC 61701).
- IP68 rated junction box for long-term weather endurance.
- 25 years output warranty.
- Certified for hail resistance.
- Certified for IEC & BIS.

### Technical Data for GOLDI DUO APEX\_144GN - Polycrystalline Module

#### Electrical Parameter at STC

Module Type	GOLDI144CWpPY24					
Capacity rating – Pmax(Wp)	315	320	325	330	335	340
Power Tolerance (%)	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3
Module efficiency (%)	15.95	16.20	16.46	16.71	16.96	17.21
Rated voltage - Vmp(V)	36.70	36.90	37.20	37.40	37.70	37.90
Rated current - Imp(A)	8.59	8.68	8.75	8.83	8.9	8.98
Open circuit voltage - Voc(V)	45.50	45.70	45.90	46.20	46.50	46.80
Short circuit current - Isc(A)	8.98	9.05	9.12	9.19	9.26	9.32

Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

#### Electrical Parameter at NOCT

Capacity rating - Pmax(Wp )	234.14	237.88	241.75	245.27	249.20	252.78
Rated voltage - Vmp(V)	34.04	34.23	34.51	34.69	34.97	35.16
Rated current - Imp(A)	6.88	6.95	7.01	7.07	7.13	7.19
Open circuit voltage - Voc	42.40	42.59	42.78	43.06	43.34	43.62
Short circuit current -Isc(A)	7.27	7.33	7.38	7.44	7.50	7.55

NOCT irradiance of 800 W/m², ambient temperature of 20°C, Wind speed 1m/sec

### Guarantees and certifications

Product warranty**	10 years
Performance guarantee**	Limited warranty for power output :- 90% for 10 years, and 80% for 25 years
Product Certified	IEC 61215, IEC 61730, IEC 61701, CE, BIS

#### Mechanical Specification

Solar cells	144 pcs Polycrystalline Silicon, 5BB/4BB
Encapsulation	Ultra - clear PID free EVA (Ethylene-Vinyl-Acetate)
Backside	UV protected reflective backsheet
Frame	Silver Anodized Aluminium Alloy
Front glass	3.2 mm, High Transmission, AR Coated Tempered Glass
Dimensions	(L) 1995 mm x (W) 990 mm x (H) 35mm
Weight	22 kg
J-box	IP 68 certified, 3 diodes junction box
Cable	Solar cable 400 mm length, 4 mm²
Connectors	MC4 compatible connectors
Application Class	Class A
Electrical Safety	Class II
Fire Safety	Class C ( Type 1)
Surface load	(snow load 5400 Pa, wind load 2400 Pa).

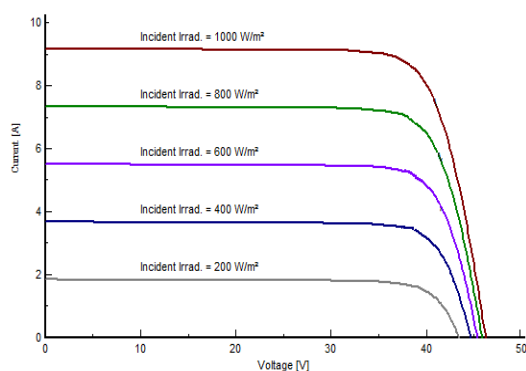
#### Temperature Coefficients (TC)

Temperature Coefficient (Voc)	-0.30% /°C
Temperature Coefficient (Isc)	0.05% /°C
Temperature Coefficient (Pmax)	-0.38% /°C

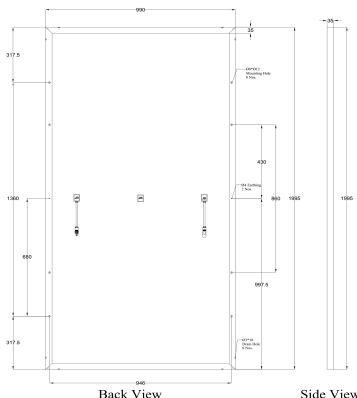
#### Permissible Operating Conditions

Temperature range	-40°C to + 85°C
Maximum system voltage	1500/1000 VDC
NOCT	45± 2°C
Hail resistance	Maximum diameter of 25 mm with velocity 23 m/s

### IV Curves



### Drawing measurement in mm



Container	20' GP	40' HC
Pallets/ container	10	22
Modules/ Container	300	660

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