

# Gokin



## 23.0%

Module Efficiency up to

First-year Degradation

Annual Degradation



Module efficiency up to 23.0% based on N-Type wafer and TOPCon technology



Unsusceptible to LID, LeTID and less annual degradation due to special characteristics of N-Type



More power output in field operation due to better thermal behaviors, weak-light performance and bifaciality



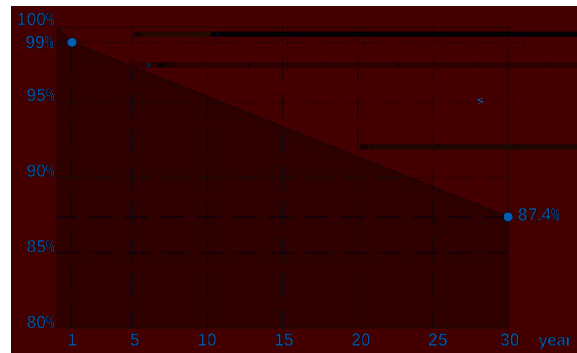
High module quality ensures long-term reliability



Product Warranty



Linear Power Warranty

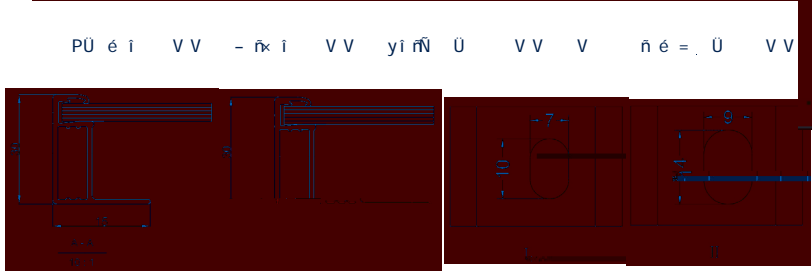
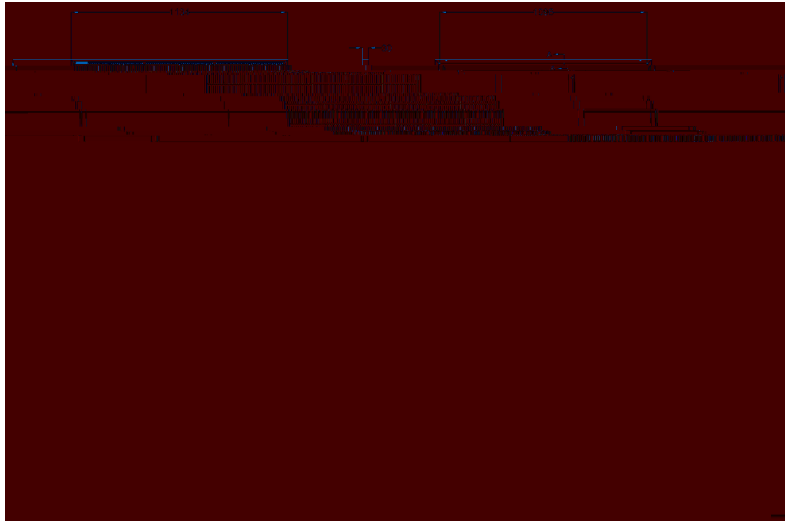


At least 99% of nominal power during first year  
Thereafter max.0.4% degradation per year  
At least 87.4% of nominal power up to 30 years.



IEC 61215(2021) / IEC 61730(2023)  
ISO 9001: 2015: ISO Quality Management System  
Anti-PID / Ammonia / Salt-mist / Dust and sand

Cell Type	TOPCon
No. of cells	132 2×66
Output Cables	TüV 1×4mm <sup>2</sup>
	(+)300mm,(-)200mm in length or customized length
Glass	Front: 3.2mm, AR-coating tempered glass
Frame	Anodized aluminum alloy frame
Weight	28.0 kg (61.73 lbs)
Dimension	2382×1134×30mm
Packaging	37 pcs per pallet
	148 pcs per 20'HC, 740 pcs per 40'HC
Protection Class	Class II



Front Side Maximum Static Loading 5400Pa

Rear Side Maximum Static Loading 2400Pa

Hailstone Test 25mm hailstone at 23m/s

Temperature Coefficient of Isc -0.045%/°C

Temperature Coefficient of Voc -0.25%/°C

Temperature Coefficient of Pmax -0.29%/°C

Module Type	8N		=y		V		8N		=y		V		8N		=y		V		8N		=y		V		
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	
Maximum Power (Pmax/W)	600	454	605	458	610	462	615	465	620	469															
Open-circuit Voltage (Voc/V)	48.32	45.16	48.48	45.31	48.64	45.46	48.80	45.61	48.96	45.76															
Short-circuit Current (Isc/A)	15.88	12.76	15.94	12.81	16.00	12.86	16.06	12.91	16.12	12.96															
Maximum Power Voltage (Vmp/V)	40.06	37.75	40.23	37.90	40.40	38.06	40.57	38.21	40.74	38.37															
Maximum Power Current (Imp/A)	14.98	12.03	15.04	12.08	15.10	12.13	15.16	12.18	15.22	12.23															
Module Efficiency (%)	22.2		22.4		22.6		22.8		23.0																

