HELIOS SOLAR WORKS

Manufactured in Milwaukee, WI

9T6 SERIES

- High-performance solar modules offering higher efficiency, lower installation costs
- 96 high-quality mono-crystalline cells per module
- Tested to TUV, UL 1703 and CEC with a Class C fire rating
- 25-year linear performance warranty
- Manufactured end-to-end in Milwaukee, Wisconsin (USA) using Helios Solar Works advanced, automated platform

Helios Solar Works manufactures high-performance mono-crystalline solar modules for solar electric systems. We use only high-quality components and an advanced, automated manufacturing platform to offer modules that deliver higher efficiency, lower installation costs, and a smaller system footprint.

Helios Solar Works is headquartered in Milwaukee, Wisconsin. We manufacture our modules using materials sourced from regional and U.S. suppliers whenever possible.

CATEGORY

Mono-crystalline Solar (96 Cell)

CHARACTERISTICS

Dimension:	1,976 mm x 1300 mm (77.8" x 51.18")
Area:	2.56 m^2 (27.55 Sq Ft)
Thickness:	40 mm (1.58")
Weight:	34.66 kg (76.41 lbs)

OUTPUT CLASSES

420, 415, 410, 405, 400, 395, 390

WARRANTY

25-year linear performance warranty delivering 80% power at STC

10-year workmanship warranty

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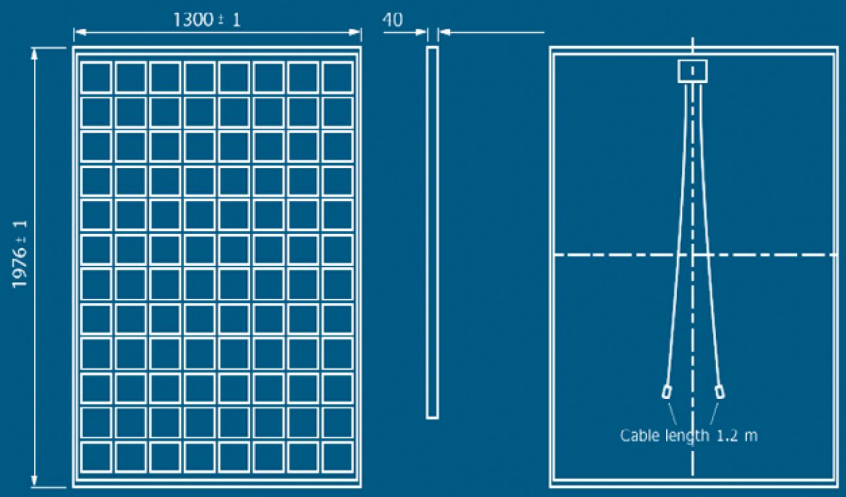
9T6 SERIES



ELECTRICAL DATA STC		9T6 420	9T6 415	9T6 410	9T6 405	9T6 400	9T6 395	9T6 390
Rated Power PMPP (W)	=	420	415	410	405	400	395	390
MPP Voltage (V)	=	49.53	49.23	48.98	48.68	48.43	48.17	47.91
MPP Current (A)	=	8.48	8.43	8.37	8.32	8.26	8.2	8.14
Open Circuit Voltage (V)	=	60.55	60.40	60.25	60	59.8	59.5	59.3
Short Circuit Current (A)	=	9	8.95	8.9	8.86	8.82	8.67	8.62

Measured at (STC) Standard Test Conditions 25° C, insolation 1,000 W/m^2, AM 1.5.

ELECTRICAL DATA NOCT		9T6 420	9T6 415	9T6 410	9T6 405	9T6 400	9T6 395	9T6 390
Rated Power PMPP (W)	=	320	315	310	305	300	295	291
MPP Voltage (V)	=	45.78	45.59	45.35	45.15	44.96	44.79	44.59
MPP Current (A)	=	6.99	6.91	6.83	6.75	6.67	6.59	6.51
Open Circuit Voltage (V)	=	56.20	55.98	55.77	55.54	55.31	55.08	54.93
Short Circuit Current (A)	=	7.42	7.35	7.28	7.21	7.14	7.05	6.96

Nominal Operating Cell Temperature (NOCT) values are typical values, 45°C.

Typical cell temperature: insolation 800W/m^2, ambient temperature 20°C, wind speed 1m/s.

OTHER ELECTRICAL PARAMETERS

System Voltage (V)	=	600/1,000	Temp. Coefficient PMPP (% / °C)	=	-0.41
Temp. Coefficient ISC (% / °C)	=	0.03	Temp. Coefficient UOC (% / °C)	=	-0.32

DESIGN

Cells	=	96 mono-crystalline, 3 bus bars	Backside	=	Multilayer sheet
Cell Dimensions	=	156 mm x 156 mm, pseudo-square	Frame	=	Anodized aluminum (clear or black)
Front glass	=	4 mm solar glass, highly transparent and anti-reflective	Connection	=	2 x 1.2 m solar cables with multi-contact connectors
Encapsulation	=	EVA - Solar Cells - EVA	Bypass Diodes	=	4 pieces

LIMIT VALUES

Module Temperature -40°C to +80°C

QUALIFICATIONS

IEC 61215, IEC 61730, UL1703, CEC, FSEC, ULC/ORD-C1703-01, TUV

WARRANTY

25 year linear performance warranty. Also 10 years workmanship.

PERFORMANCE OUTPUT

-0/+3 percent