

SPECIFICATION CATEGORIES		STP005B -12/DEA	STP010D -12/KEA	STP020B -12/CEA	STP030D -12/LEA	STP040D -12/REA	STP045D -12/REA	STP050D -12/MEA	STP055D -12/MEA	STP060D -12/SEA	STP065D -12/SEA	STP085B -12/BEA	STP090B -12/BEA	STP130D -12/TEA	STP135D -12/TEA	
ELECTRICAL CHARACTERISTICS	Open-Circuit Voltage (Voc)	21.6 V	21.6 V	21.7 V	21.6 V	21.8 V	22.0 V	21.8 V	22.2 V	21.6 V	21.8 V	22.2 V	22.4 V	22.0 V	22.3 V	
	Optimum Operating Voltage (Vmp)	17.4 V	17.4 V	17.6 V	17.2 V	17.4 V	17.6 V	17.4 V	17.5 V	17.4 V	17.6 V	17.8 V	18.0 V	17.4 V	17.5 V	
	Short-Circuit Current (Isc)	0.32 A	0.65 A	1.26 A	1.94 A	2.58 A	2.79 A	3.13 A	3.34 A	3.90 A	4.11 A	5.15 A	5.29 A	8.09 A	8.20 A	
	Optimum Operating Current (Imp)	0.29 A	0.57 A	1.14 A	1.74 A	2.30 A	2.56 A	2.93 A	3.14 A	3.45 A	3.69 A	4.80 A	5.00 A	7.47 A	7.71 A	
	Maximum Power at STC* (Pmax)	5 Wp	10 Wp	20 Wp	30 Wp	40 Wp	45 Wp	50 Wp	55 Wp	60 Wp	65 Wp	85 Wp	90 Wp	130 Wp	135 Wp	
	Operating Temperature	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
	Maximum System Voltage	30 V DC	30 V DC	30 V DC	30 V DC	1000 V DC	1000 V DC	1000 V DC	1000 V DC	1000 V DC	1000 V DC	1000 V DC	1000 V DC	1000 V DC	1000 V DC	1000 V DC
	Maximum Series Fuse Rating	5 A	5 A	5 A	5 A	10 A	10 A	10 A	10 A	15 A	15 A	15 A	15 A	20 A	20 A	
	Power Tolerance	±10 %	±10 %	±10 %	±10 %	±5 %	±5 %	±5 %	±5 %	±5 %	±5 %	±5 %	±5 %	±5 %	±5 %	±5 %
	Nominal Voltage	12V	12V	12V	12V	12V	12V	12V	12V	12V	12V	12V	12V	12V	12V	12V
MECHANICAL CHARACTERISTICS	Solar Cell	Monocrystalline	Polycrystalline	Monocrystalline	Polycrystalline	Polycrystalline	Polycrystalline	Polycrystalline	Polycrystalline	Polycrystalline	Polycrystalline	Monocrystalline	Monocrystalline	Polycrystalline	Polycrystalline	
	No. of Cells	36 (4x9)	36 (6x6)	36 (2x18)	36 (4x9)	36 (4x9)	36 (4x9)	36 (4x9)	36 (4x9)	36 (4x9)	36 (4x9)	36 (4x9)	36 (4x9)	36 (4x9)	36 (4x9)	
	Dimensions (mm/inch)	216x306x18 / 8.5x12.0x0.7	310x368x18 / 12.2x14.5x0.7	656x306x18 / 25.8x12.0x0.7	426x680x18 / 16.8x26.8x0.7	537x665x30 / 21.1x26.2x1.2	537x665x30 / 21.1x26.2x1.2	631x665x30 / 24.8x26.2x1.2	631x665x30 / 24.8x26.2x1.2	771x665x30 / 30.4x26.2x1.2	771x665x30 / 30.4x26.2x1.2	1195x541x30 / 47.0x21.3x1.2	1195x541x30 / 47.0x21.3x1.2	1482x676x35 / 58.3x26.6x1.4	1482x676x35 / 58.3x26.6x1.4	
	Weight (kg/lbs)	0.8 / 1.8	1.5 / 3.3	2.5 / 5.5	3.2 / 7.0	4.5 / 9.9	4.5 / 9.9	5.3 / 11.7	5.3 / 11.7	6.2 / 13.7	6.2 / 13.7	8 / 17.6	8 / 17.6	12 / 26.4	12 / 26.4	
	Junction Box	IP65 rated (Openable)	IP65 rated (Openable)	IP65 rated (Openable)	IP65 rated (Openable)	IP65 rated	IP65 rated	IP65 rated	IP65 rated	IP65 rated	IP65 rated	IP65 rated	IP65 rated	IP65 rated	IP65 rated	
	Output Cables (mm/inch)	—	—	—	—	H+S (12 AWG) Symmetrical Lengths (-) 750 / 29.5 and (+) 750 / 29.5 MC4 Connectors	H+S (12 AWG) Symmetrical Lengths (-) 750 / 29.5 and (+) 750 / 29.5 MC4 Connectors	H+S (12 AWG) Symmetrical Lengths (-) 750 / 29.5 and (+) 750 / 29.5 MC4 Connectors	H+S (12 AWG) Symmetrical Lengths (-) 750 / 29.5 and (+) 750 / 29.5 MC4 Connectors	H+S (12 AWG) Symmetrical Lengths (-) 750 / 29.5 and (+) 750 / 29.5 MC4 Connectors	H+S (12 AWG) Symmetrical Lengths (-) 750 / 29.5 and (+) 750 / 29.5 MC4 Connectors	H+S (12 AWG) Symmetrical Lengths (-) 750 / 29.5 and (+) 750 / 29.5 MC4 Connectors	H+S (12 AWG) Symmetrical Lengths (-) 750 / 29.5 and (+) 750 / 29.5 MC4 Connectors	H+S (12 AWG) Symmetrical Lengths (-) 750 / 29.5 and (+) 750 / 29.5 MC4 Connectors	H+S (12 AWG) Symmetrical Lengths (-) 750 / 29.5 and (+) 750 / 29.5 MC4 Connectors	
TEMP. CHARACTERISTICS	Nominal Operating Cell Temperature (NOCT**)	45±2°C	45±2°C	45±2°C	45±2°C	45±2°C	45±2°C	45±2°C	45±2°C	45±2°C	45±2°C	45±2°C	45±2°C	45±2°C	45±2°C	
	Temp. coefficient of Pmax	-0.48 %/°C	-0.47 %/°C	-0.48 %/°C	-0.47 %/°C	-0.48 %/°C	-0.48 %/°C	-0.47 %/°C	-0.47 %/°C	-0.47 %/°C	-0.47 %/°C	-0.48 %/°C	-0.48 %/°C	-0.47 %/°C	-0.47 %/°C	
	Temp. coefficient of Voc	-0.34 %/°C	-0.34 %/°C	-0.34 %/°C	-0.34 %/°C	-0.34 %/°C	-0.34 %/°C	-0.34 %/°C	-0.34 %/°C	-0.34 %/°C	-0.34 %/°C	-0.34 %/°C	-0.34 %/°C	-0.34 %/°C	-0.34 %/°C	
	Temp. coefficient of Isc	0.037 %/°C	0.045 %/°C	0.037 %/°C	0.045 %/°C	0.037 %/°C	0.037 %/°C	0.045 %/°C	0.045 %/°C	0.045 %/°C	0.045 %/°C	0.037 %/°C	0.037 %/°C	0.045 %/°C	0.045 %/°C	

 *STC: Irradiance 1000W/m², module temperature 25°C, AM=1.5

 **NOCT: Irradiance 800W/m², ambient temperature 20°C, wind speed 1m/s