



Polycrystalline Solar Module

CE-20/22P36

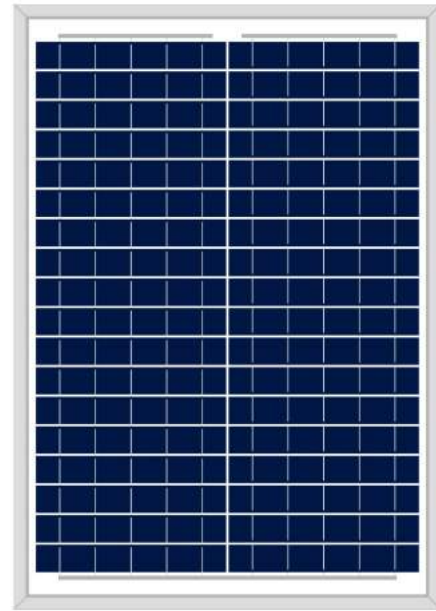
Warranty

10-year repair and workmanship warranty

12-year warranty at 90% power output

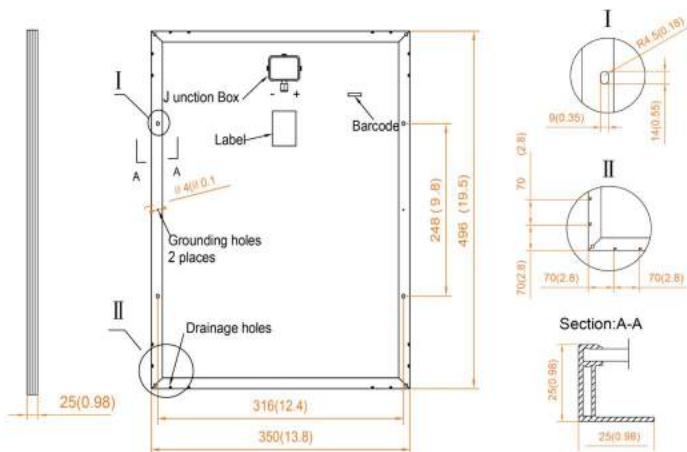
25-year warranty at 80% power output

Typical Electrical Characteristics



Models	CE-20P36	CE-22P36
Max. Power (Pmax)	20Wp	22Wp
Optimum Operating Voltage (Vm)	18.1V	18.2V
Optimum Operating Current (Im)	1.10A	1.21A
Open-circuit Voltage (Voc)	22.1V	22.3V
Short-circuit Current (Isc)	1.19A	1.31A
Module efficiency	11.5%	12.7%

Note: the specifications are obtained under the Standard Test Condition (STC): 1,000W/m², Am 1.5, Cell Temperature 25°C



Solar cell	Poly-crystalline 156.75×22.3mm
Power Tolerance (Pmax)	0 ~ +3%
Numbers of cells	36pcs of cells in series
Module Dimension	496×350×25mm
Weight	2Kg
Max. System Voltage	1000V DC
Max. Series Fuse Rating	16A
Temperature cycling range	-40°C ~ +85°C
NOTC	45±2°C
Temperature coefficients of Isc	(+0.04%/°C)
Temperature coefficients of Voc	(-0.31%/°C)
Temperature coefficients of Pmax	(-0.4%/°C)



Polycrystalline Solar Module

CE-45/50/55P36

Warranty

10-year repair and workmanship warranty

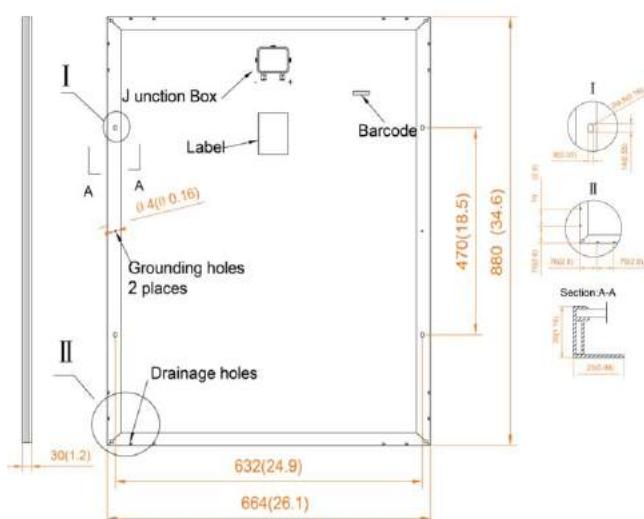
12-year warranty at 90% power output

25-year warranty at 80% power output

Typical Electrical Characteristics

Models	CE-45P36	CE-50P36	CE-55P36
Max. Power (Pmax)	45Wp	50Wp	55Wp
Optimum Operating Voltage (Vm)	17.6V	17.8V	18.1V
Optimum Operating Current (Im)	2.56A	2.81A	3.04A
Open-circuit Voltage (Voc)	21.8V	22.1V	22.3V
Short-circuit Current (Isc)	2.79A	3.06A	3.18A
Module efficiency	12.8%	14.2%	15.6%

Note: the specifications are obtained under the Standard Test Condition (STC): 1,000W/m², Am 1.5, Cell Temperature 25°C



Solar cell	Poly-crystalline 156.75×52mm
Power Tolerance (Pmax)	0 ~ +3%
Numbers of cells	36pcs of cells in series
Module Dimension	530×664×30mm
Weight	4.1Kg
Max. System Voltage	1000V DC
Max. Series Fuse Rating	16A
Temperature cycling range	-40°C ~ +85°C
NOTC	45±2°C
Temperature coefficients of Isc	(+0.04%/°C)
Temperature coefficients of Voc	(-0.31%/°C)
Temperature coefficients of Pmax	(-0.4%/°C)



Polycrystalline Solar Module

CE-85/90P36

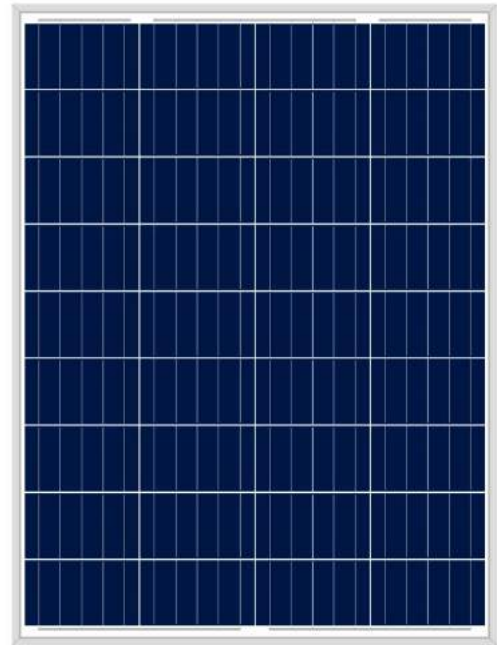
Warranty

10-year repair and workmanship warranty

12-year warranty at 90% power output

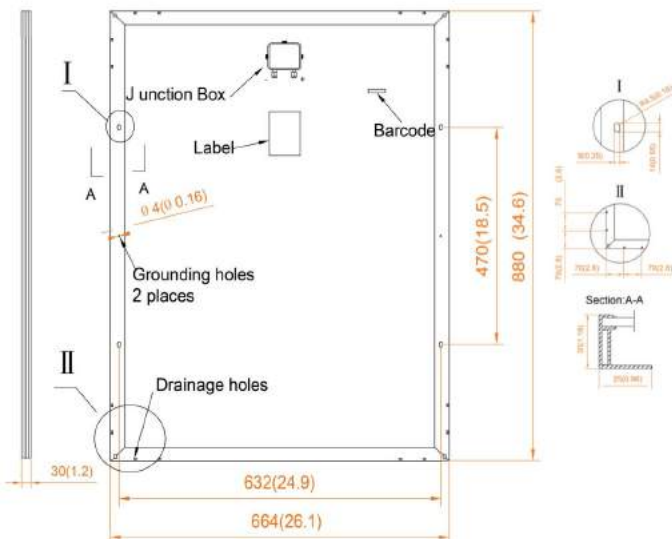
25-year warranty at 80% power output

Typical Electrical Characteristics



Models	CE-85P36	CE-90P36
Max. Power (Pmax)	85Wp	90Wp
Optimum Operating Voltage (Vm)	18.4V	18.6V
Optimum Operating Current (Im)	4.62A	4.84A
Open-circuit Voltage (Voc)	22.4V	22.6V
Short-circuit Current (Isc)	4.99A	5.23A
Module efficiency	14.5%	15.4%

Note: the specifications are obtained under the Standard Test Condition (STC): 1,000W/m², Am 1.5, Cell Temperature 25°C



Solar cell	Poly-crystalline 156.75×90mm
Power Tolerance (Pmax)	0 ~ +3%
Numbers of cells	36pcs of cells in series
Module Dimension	880×664×30mm
Weight	6.7Kg
Max. System Voltage	1000V DC
Max. Series Fuse Rating	16A
Temperature cycling range	-40°C ~ +85°C
NOTC	45±2°C
Temperature coefficients of Isc	(+0.04%/°C)
Temperature coefficients of Voc	(-0.31%/°C)
Temperature coefficients of Pmax	(-0.4%/°C)



Polycrystalline Solar Module

CE-95/100/105P36

Warranty

10-year repair and workmanship warranty

12-year warranty at 90% power output

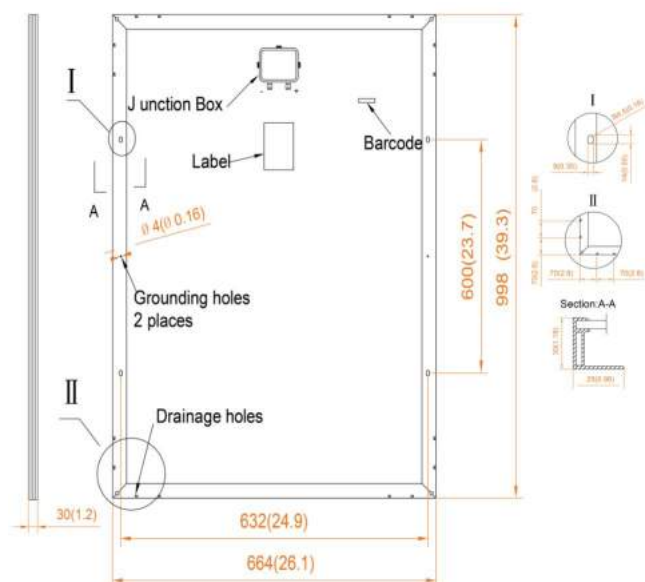
25-year warranty at 80% power output

Typical Electrical Characteristics



Models	CE-95P36	CE-100P36	CE-105P36
Max. Power (Pmax)	95Wp	100Wp	105Wp
Optimum Operating Voltage (Vm)	18.2V	18.4V	18.6V
Optimum Operating Current (Im)	5.22A	5.43A	5.65A
Open-circuit Voltage (Voc)	22.2V	22.4V	22.6V
Short-circuit Current (Isc)	5.64A	5.87A	6.10A
Module efficiency	14.3%	15.1%	15.8%

Note: the specifications are obtained under the Standard Test Condition (STC): 1,000W/m², Am 1.5, Cell Temperature 25°C



Solar cell	Poly-crystalline 156.75×104mm
Power Tolerance (Pmax)	0 ~ +3%
Numbers of cells	36pcs of cells in series
Module Dimension	998×664×30mm
Weight	7.6Kg
Max. System Voltage	1000V DC
Max. Series Fuse Rating	16A
Temperature cycling range	-40°C ~ +85°C
NOTC	45±2°C
Temperature coefficients of Isc	(+0.04%/°C)
Temperature coefficients of Voc	(-0.31%/°C)
Temperature coefficients of Pmax	(-0.4%/°C)



Polycrystalline Solar Module

CE-140/145/150/155/160/165P36

Warranty

10-year repair and workmanship warranty

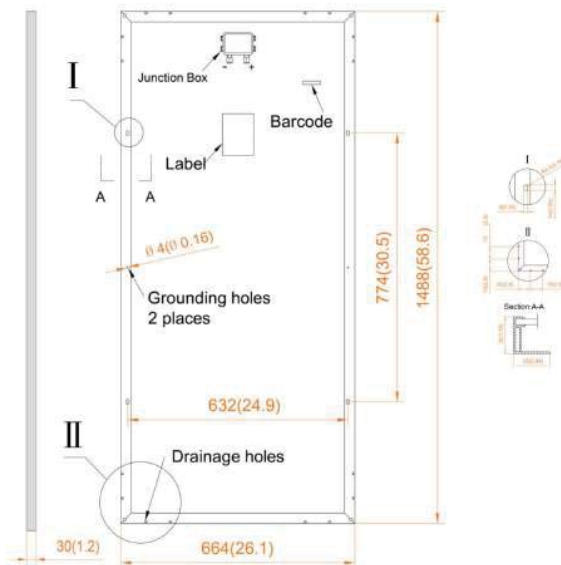
12-year warranty at 90% power output

25-year warranty at 80% power output

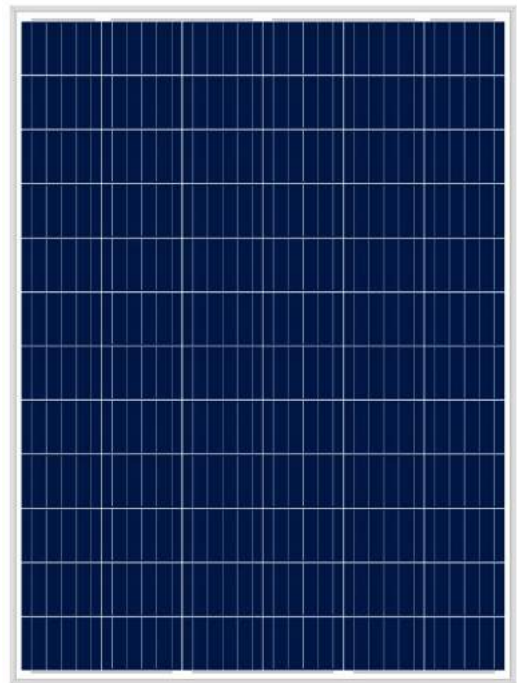
Typical Electrical Characteristics

Models	CE-140P36	CE-145P36	CE-150P36	CE-155P36	CE-160P36	CE-165P36
Max. Power (Pmax)	140Wp	145Wp	150Wp	155Wp	160Wp	165Wp
Optimum Operating Voltage (Vm)	18.2V	18.3V	18.4V	18.5V	18.6V	18.8V
Optimum Operating Current (Im)	7.69A	7.92A	8.15A	8.38A	8.60A	8.78A
Open-circuit Voltage (Voc)	22.2V	22.3V	22.4V	22.5V	22.6V	22.9V
Short-circuit Current (Isc)	8.31A	8.56A	8.80A	9.05A	9.27A	9.46A
Module efficiency	14.2%	14.7%	15.2%	15.7%	16.2%	16.7%

Note: the specifications are obtained under the Standard Test Condition (STC): 1,000W/m², Am 1.5, Cell Temperature 25°C



Solar cell	Poly-crystalline 156.75×156.75mm
Power Tolerance (Pmax)	0 ~ +3%
Numbers of cells	36pcs of cells in series
Module Dimension	1488×664×30mm
Weight	12Kg
Max. System Voltage	1000V DC
Max. Series Fuse Rating	16A
Temperature cycling range	-40°C ~ +85°C
NOTC	45±2°C
Temperature coefficients of Isc	(+0.04%/°C)
Temperature coefficients of Voc	(-0.31%/°C)
Temperature coefficients of Pmax	(-0.4%/°C)



Polycrystalline Solar Module

CE-190/195/200/205/210/215P72

Warranty

10-year repair and workmanship warranty

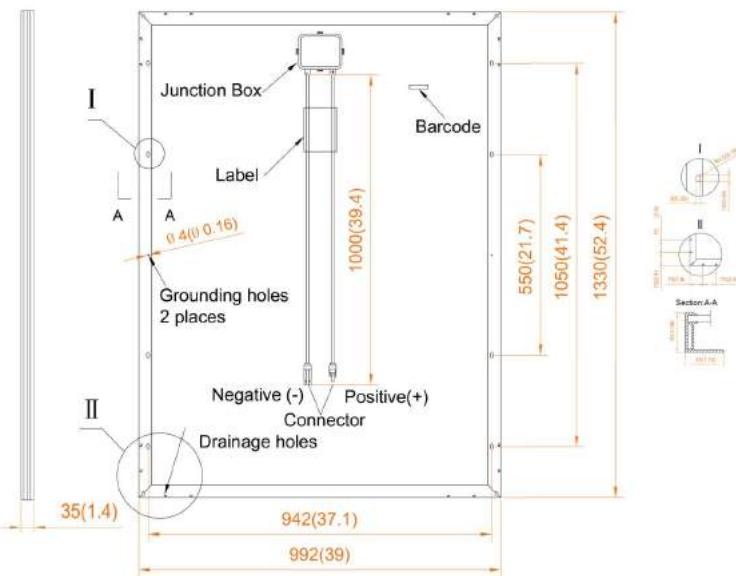
12-year warranty at 90% power output

25-year warranty at 80% power output

Typical Electrical Characteristics

Models	CE-190P72	CE-195P72	CE-200P72	CE-205P72	CE-210P72	CE-215P72
Max. Power (Pmax)	190Wp	195Wp	200Wp	205Wp	210Wp	215Wp
Optimum Operating Voltage (Vm)	36.6V	36.8V	36.9V	37.1V	37.3V	37.6V
Optimum Operating Current (Im)	5.19A	5.30A	5.42A	5.53A	5.63A	5.72A
Open-circuit Voltage (Voc)	44.6V	44.8V	44.9V	45.1V	45.3V	45.6V
Short-circuit Current (Isc)	5.61A	5.72A	5.85A	5.97A	6.08A	6.17A
Module efficiency	14.4%	14.8%	15.2%	15.6%	16.0%	16.3%

Note: the specifications are obtained under the Standard Test Condition (STC): 1,000W/m², Am 1.5, Cell Temperature 25°C



Solar cell	Poly-crystalline 156.75×104mm
Power Tolerance (Pmax)	0 ~ +3%
Numbers of cells	36pcs of cells in series
Module Dimension	1330×992×35mm
Weight	15.5Kg
Max. System Voltage	1000V DC
Max. Series Fuse Rating	16A
Temperature cycling range	-40°C ~ +85°C
NOTC	45±2°C
Temperature coefficients of Isc	(+0.04%/°C)
Temperature coefficients of Voc	(-0.31%/°C)
Temperature coefficients of Pmax	(-0.4%/°C)