

## LPW-545MCV-144MH

MBB Half-Cell PERC Module

### Key Features



Higher conversion efficiency - more power production per unit area



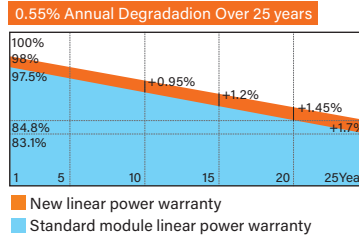
Lower temperature coefficient



Positive power tolerance : 0~+5W



Less shading effect



12-year product warranty  
25-year linear power output warranty

### Comprehensive Certificates

- IEC 61215, IEC 61730
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems



### The Ideal Solution for



Rooftop systems on residential buildings



Ground-mounting systems



Rooftop systems on commercial/industrial buildings

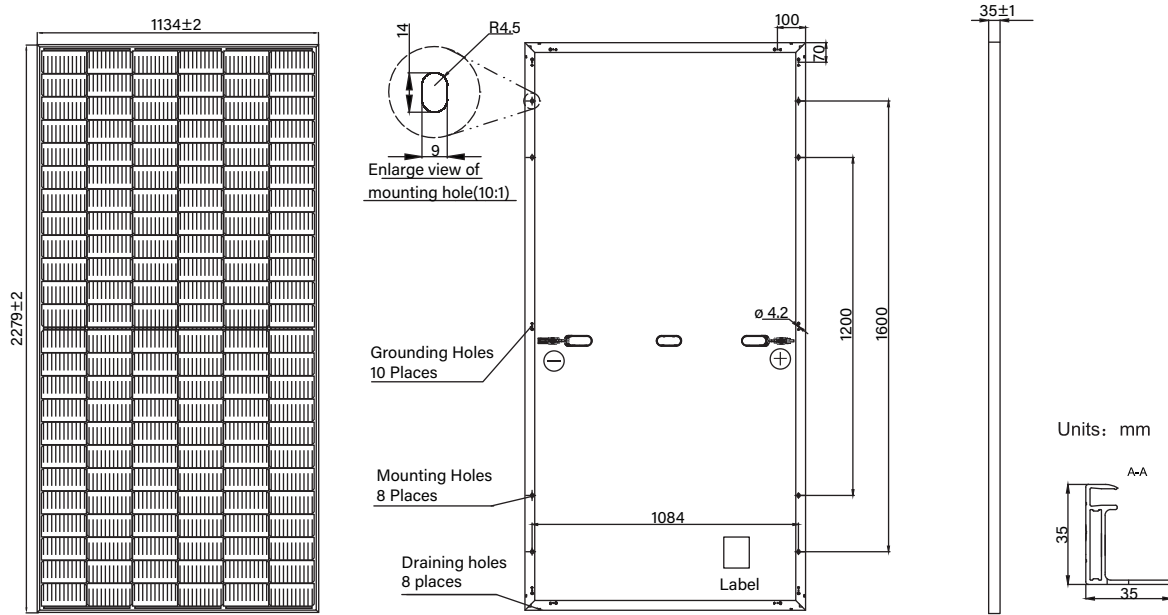
### About Loop

Loop is a venture company founded in the wake of the Great East Japan Earthquake which occurred in March 2011. As a volunteer effort, the Company installed stand-alone solar power systems in areas affected by the disaster. Since its foundation, Loop has sold solar power systems. It also has been engaged in the installation and operation of company-owned power plants, as well as providing remote monitoring systems and O&M services, achieving increased sales growth annually.

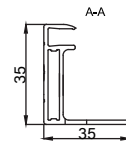
Loop has sold more than 2,300 solar power systems\* nationwide. The simplicity of our packaged solar power plant kit, which includes all the necessary components, has been favored by many, and many more power plants are installing the Loop system across Japan. Our ever-increasing sales performance is proof of the trust that our clients place in us. \*As of the end of May 2020

Since 2015, beside the PV panel installation business, Loop also has offered a broad array of energy services in its electricity retail business division called "Loop Denki". As by end of March 2021, Loop had counted over 310,000 low-voltage plan users (customers), making it the largest independent electricity retailer in Japan.





Units: mm



**Mechanical Parameters**

Model Number	LPW-545MCV-144MH
Dimensions (L×W×H) (mm)	2279±2 × 1134±2 × 35±1
Weight (kg)	28.6±3%
Cell Arrangement	144 (6×24)
Cell	Mono
Junction Box	IP68, 3 diodes
Cable Cross Section Size (mm <sup>2</sup> )	4
Connector	QC 4.10-35
Cable Length (Including Connector)	Portrait:300mm(+)/400mm(-); Landscape:1300mm(+)/1300mm(-)
Packaging Configuration	31 Per Pallet 620pcs/40ft. Container

**Working Conditions**

Maximum System Voltage	1500V DC (IEC)
Operating Temperature	-40°C ~ +85°C
Maximum Static Load, Front	5400Pa (112 lb/ft <sup>2</sup> )
Maximum Static Load, Back	2400Pa (50 lb/ft <sup>2</sup> )
Maximum Series Fuse	25A
Nominal Operating Cell Temperature	45±2°C
Application Classification	Class II

**Electrical Parameters**

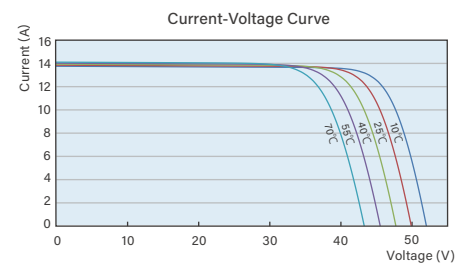
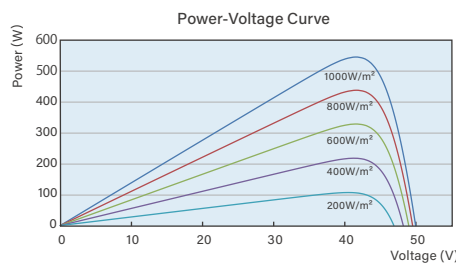
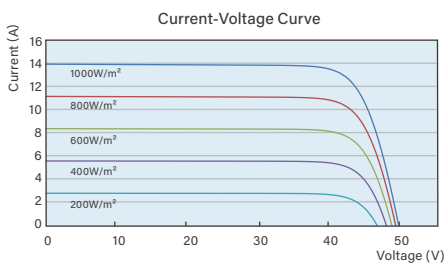
Rated Maximum Power at STC (W)	545
Open Circuit Voltage (Voc/V)	49.75
Maximum Power Voltage (Vmp/V)	41.80
Short Circuit Current (Isc/A)	13.93
Maximum Power Current (Imp/A)	13.04
Module Efficiency (%)	21.1
Power Tolerance (W)	0~+5
Temperature Coefficient of Isc ( $\alpha$ Isc)	+0.045%/°C
Temperature Coefficient of Voc ( $\beta$ Voc)	-0.275%/°C
Temperature Coefficient of Pmax ( $\gamma$ Pmp)	-0.350%/°C
STC	Irradiance 1000W/m <sup>2</sup> , cell temperature 25°C, AM 1.5G

**NOCT**

Max Power (Pmax) [W]	412
Open Circuit Voltage (Voc) [V]	46.55
Max Power Voltage (Vmp) [V]	39.20
Short Circuit Current (ISC) [A]	11.13
Max Power Current (Imp) [A]	10.51
Condition	Irradiance 800W/m <sup>2</sup> , ambient temperature 20°C, wind speed 1m/s, AM 1.5G

The information contained herein is subject to change without notice. The electrical parameter on the module label may have some difference with module datasheet according to certificate guidelines.

**I-V Curves (LPW-545MCV-144MH)**



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