



Lumeta's LPP 420 is a Building Integrated Photovoltaic (BIPV) module for low slope applications. The LPP 420 utilizes monocrystalline solar cells to maximize energy output per area of roof surface. The LPP 420's adhesive backing material eliminates the need for rack mounted structures, yielding seamless integration with the roof system. Lumeta's LPP 420 significantly reduces installation time and costs.



## Features & Benefits:

**High Installed Power Density**  
Maximizes energy output of rooftop space by utilizing proven, high-efficiency monocrystalline silicon cells.

**Minimized Roof Load**  
Adheres directly to roof without racking, reducing system weight and eliminating wind loading issues.

**No Roof Penetrations**  
Prevents water leaks and costly roof maintenance caused by racking systems.

**Simplified Installation**  
Reduces installation time by approximately 60% and installation costs by up to 50%.



Lumeta is a leading developer of Building Integrated Photovoltaic (BIPV) products.

With over 30 years of experience in the roofing industry, we've been able to develop innovative solar modules that integrate into a variety of commercial and residential roof systems. Lumeta solar modules are as aesthetically pleasing as they are highly functional.

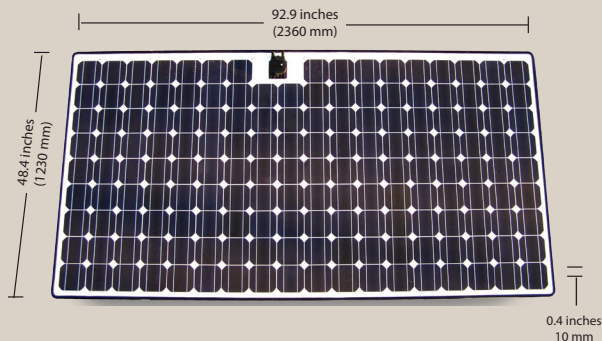
## Electrical Characteristics

Peak Power (Pmax)*	420 Wp (+/- 5%)
Maximum Power Point Voltage (Vmpp)*	82 V
Maximum Power Point Current (Impp)*	5.15 A
Open Circuit Voltage (Voc)*	100.4 V
Short Circuit Current (Isc)*	5.57 A
Module Efficiency*	14.5%
Operating Temperature	-40°C to +85°C
Maximum Series Fuse Rating	15 A
Nominal Operating Cell Temperature (NOCT)	60°C +/- 2°C
Temperature Coefficient of Power (Pmax)	-0.45 %/°C
Temperature Coefficient of Voltage (Voc)	-0.35 %/°C
Temperature Coefficient of Current (Isc)	0.02 %/°C

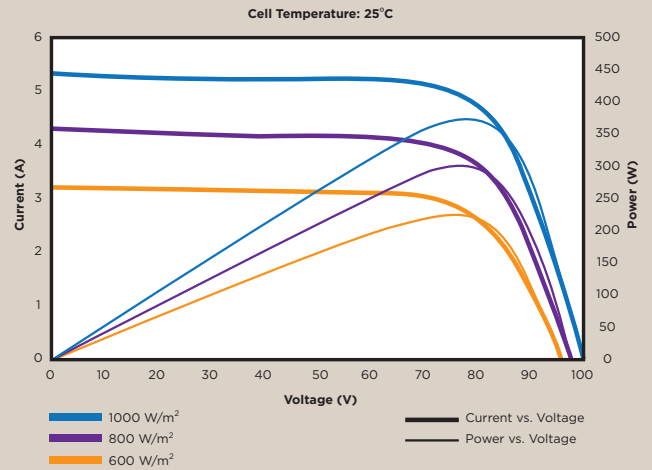
\*Measured at Standard Test Conditions (STC): Irradiance 1000 W/m<sup>2</sup>, AM 1.5, Cell Temperature 25°C

## Mechanical Characteristics

Solar Cells:	160 Monocrystalline Silicon 125 x 125 mm
Dimensions:	92.9 x 48.4 x 0.4 inches (2360 x 1230 x 10 mm)
Weight:	65 lbs (30 kg)
Front Sheet:	DuPont® Tefzel® (ETFE)
Encapsulation:	Ethyl Vinyl Acetate (EVA)
Back Sheet:	Fiberglass Reinforced Plastic (FRP)
Junction Box:	IP-65 rated
Adhesive:	Peel-and-Stick Polymer Tape
Roof Compatibility:	Single Ply Membranes (PVC, TPO, EPDM), Modified Bitumen, Metal
Roof Slope:	2:12 (10°) or less



## IV Curves



## Warranty

5-year repair or replacement warranty

12-year / 25-year limited peak power warranty

## Certifications

UL 1703 for use in systems up to 600 V, CSA listed

IEC 61215 and IEC 61730 for use in systems up to 1000 V

Fire Rating: Class B up to 1:12 Slope, Class C Unlimited Slope

## Patents

US Patents 7,531,740 and 7,557,291 issued

Additional US and/or international patents may apply

## Notes

Consult Installation Manual for detailed instructions

Specifications are subject to change without notice

## Dealer Information