

# JouleStickKit2+

## Product Specifications

PS-JouleStickKit2+-01/01-0806 2017



Pico LEC20



F200T



USB to Micro USB Cable



PhoneStick

Bottle Stand



### Item Quantities in each kit

JouleStick 30	1
PicoLEC20	1
F200T lamp	1
Bottle Stand	1
PhoneStick	1
USB to Micro USB Cable	1

### Master Box Dimensions

Quantity per Master Box	24
Length	465 mm
Width	330 mm
Height	245 mm
Volume	37.60 liters
Mass	7.7 kg

### Retail Box Dimensions

Length	78 mm
Width	72 mm
Height	230 mm
Volume	1.29 liter
Mass	0.3 kg

### Pallet Dimensions

Master Box Quantity per Pallet	36
Lightkit Quantity per Pallet	864
Length	1100 mm
Width	1100 mm
Height	1130 mm
Volume	1367.30 liter
Mass	289.2 kg

# JouleStick30

Product Specifications  
PS-JS30-01/01-170616

The JouleStick30 is a lithium-Ion energy storage device with build in electronic circuit to protect against over-charge, over-discharge and short circuit. The electrical contacts of the JouleStick are goldplated to ensure a low contact resistance and a long life of the mechanical connection. The JouleStick has an expected life of over 30MJ of energy delivery which translates in approximately 2000 charge/discharge cycles of about 15kj per cycle or 1500 charge/discharge cycles of 20kj per cycle.

## Product HighLights

- The JouleStick30 contains 30kj of energy
- Fully charges a smart phone or 2 low feature phones
- Up to 60 hours on a full charge (Lowest light output of F200T)
- Recharged via the PicoLEC20 Solar Panel or via a phonestick and USB port
- Splash-Waterproof and is suitable for outdoor usage even in the rain
- Electrical contacts are completely sealed and no water can leak through the contacts to the inside of the lamp that houses the battery and electronic circuit.



Refill your JouleStick30 from the sun



Refill your Phone from the JouleStick30



Use your JouleStick30 as Table Lamp

## JouleStick30 Performance

Energy Storage Capacity	30 kj
Aproximale lifetime energy	30 MJ

## Charging details

Max Charging Capacity (per hour)	30 kj/h
Max Charging Capacity (per second)	10 J/s (W)
Max Charge Current	2 A
Charging Operating Temperature	0°C to 45°C

## Discharging details

Max Discharging Capacity (per hour)	30 kj/h
Max Discharging Capacity (per second)	10 J/s (W)
Max Discharging Current	2 A
Output Voltage Range	3.0 - 4.2 VDC
Charging Operating Temperature	20°C to 60°C

## Mechanical Details

Connector System	Pogopin
Enclosure Material	ABS + UV Stabilized
Color	Blue
Product Dimension (DxH)	22 x 72 mm
Product Dimension with Sleeve (DxH)	27 x 80 mm
Nett Product Weight	50 gr
Product Weight with Sleeve	61 gr
Packaging Options	Individual Packing or as part of JouleStick kits
Individual Box Dimension	30 x 30 x 115 mm
Gross Product Weight	71 gr

## Protections

Protection on Inputs	Over Voltage Cut-off Over current Protection
Protection on 12-16 V Outputs	Under Voltage Cut-off Over Load Protection Short Circuit Protection

# F200T

Product Specifications  
PS-F200T-01/01-230616

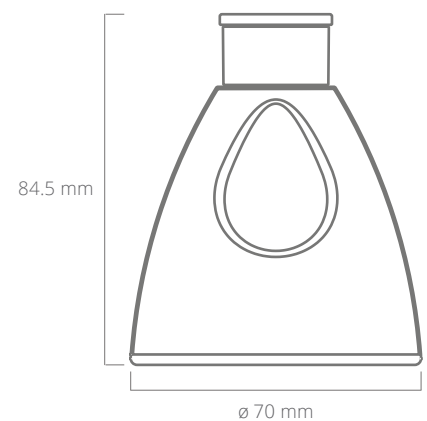
The F200T is a DC Light bulb based on ultra efficient Light Emitting Diode Technology that can operate within a DC Voltage range of 3 up to 4.2 V. The F200T is connected through a unique plug and play system that allows for a very quick installation. The F200T has a highly diffused lens to give a non glare and equally distributed light output that is safe for the eyes.



F200T Performance	Low	Medium	High
Light Output	20 Lumen	80 Lumen	200 Lumen
Energy Content	30kj ( assumption when using JouleStick30)		
Energy Consumption	0.5 kj/h	2.5kj/h	6 kj/h
Light hours	60 hours	12 hours	5 hours

## Electrical Details

Safe Input Voltage Range	3 - 4,2 VDC
Max Operating Current	620 mA (@3,1V)

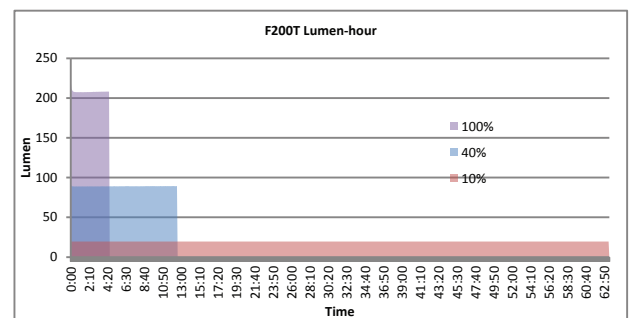


## Mechanical and Environmental Details

Connector System	Pogo Pin
Enclosure Material	ABS + UV Stebilized
Lens Material	PC + UV Stebilized
Connector Material	Gold Plates Brass
Color	Grey
Product Dimensions	ø 70 mm x 84.5 mm Height
Nett Product Weight	52 gr
Packaging Options	Individual Packing or as part of JouleStick kits
Individual Box Dimension	73 x 72 x 118 mm
Gross Product Weight	60 gr

## Protection

Enclosure protection class	IP 54
CE Compliance	YES



# PicoLEC20

Product Specifications  
PS-LEC600-01/01-210616

The **LEC20** can harvest approximately 20kj of energy per day when parked in full sunlight without being obstructed by shadow. During a very bright day the output can be up to 30kj. During a cloudy day and obstructions by shadow the energy output could be reduced to only 10kj or less. In order to get the maximum energy harvest ensure that you put out the LEC20 in full sunshine as early in the morning as possible and direct the panel surface under straight angle facing the sun's rays.

The LEC20 is made of highly durable material and used correctly the life of this product can reach over 20 years.

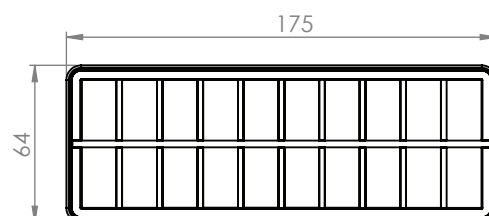
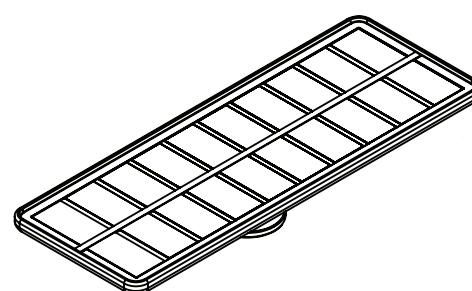


## General

Product Name	Photovoltaic Module (PV Module)
Product Type	PicoLEC20
Product Description	High Efficiency Multi Crystalline Photovoltaic Module for solar home system applications

## Electrical Details

Electricity Generation Capacity	20 kJoule/day @ 5.5 Sun Hours
Maximum Energy Rating (Pmax)	1 Wp
Tolerance	+/- 10%
Cell Efficiency	+/- 17%
FF	+/- 71%
Total Cell	10 Cell
Maximum Power Voltage (Vmp)	4.32 V
Maximum Power Current (Imp)	0.23 A
Open Circuit Voltage (Voc)	5.38 V
Short-Circuit Current (Isc)	0.26 A



## Thermal Parameters

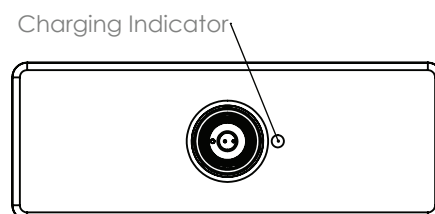
Nominal Operating Cell Temperature	40°C to 90°C
Isc Current Temperature Coefficient	(1.33 x 0.001) A/°C
Voc Voltage Temperature Coefficient	(-8.21 x 0.01) V/°C

Note: The electrical specifications are under test conditions of Irradiance of 1kW/m<sup>2</sup>, spectrum of 1.5 air mass and cell temperature of 25°C



## Mechanical Details

Frame Materials	ABS + UV Stabilized
Product Dimensions (LxWxH)	175 x 64 x 29 mm
Nett Product Weight	100 gr
Packaging Options	Individual Packing or as part of JouleStick kits
Individual Box Dimension	212 x 65 x 30 mm
Gross Weight	117 gr



# PhoneStick

## Product Specifications

PS-PhoneStick-01/01-230616

The **PhoneStick** is multifunctional charger that can be directly connected to JouleStick.

The **Phonestick** can charge any device that can be charged from a USB standard socket and it also can be used to energize small radio or cassette player with a rated voltage of 4.5 to 6 VDC (3 to 4 Alkaline).

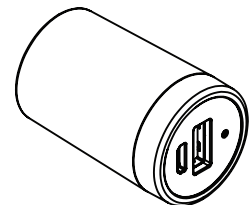
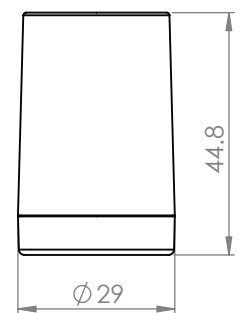
The Charger can supply to maximum of 1000 mA current and is protected for short circuit and overload.



### Electrical details

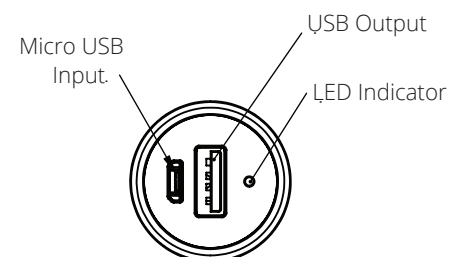
Rated Input Voltage	3 - 4.2 VDC
Nominal Output Voltage	5 V
Maximum Input Current	1000 mA
Maximum Output Current	1000 mA
Electrical Efficiency	95%
Enclosure Protection Class	IP 22
Operating Temperature	0° to 60 °C
LED indicator*	
1 blink	20% battery capacity
2 blink	40% battery capacity
3 blink	60% battery capacity
4 blink	80% battery capacity
Glow Constantly	fully charge

\* LED indicator will blink when charging and discharging process



### Mechanical details

Operating Temperature Range	-10 C to + 55 °C
Enclosure Material	ABS + UV Stabilized
Connector Material	Gold Plates Brass
Product Dimensions (L x Dia.mm)	44.8 x 29 mm
Nett Product Weight	15.5 gr
Packaging Options	Individual packing or as part of JouleStick Kits
Individual Box Dimension	120 x 70 x 30 mm
Gross Product Weight	25 gr



### Protection

Short Circuit Protection	Yes
Over Load Protection	Yes

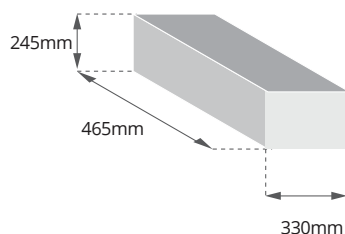
# JouleStick LightKit

## Container & Shipping Details

PS-JouleStickKit2+-01/01-0806 2017

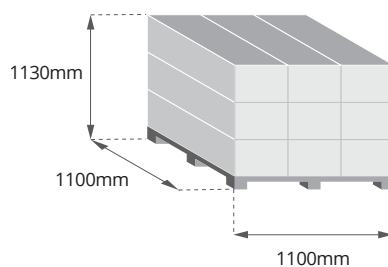
### Master Box

### Lightkit 2+



24 set/box

### Pallet



36 master box  
864 set/pallet

## Quantities per Container

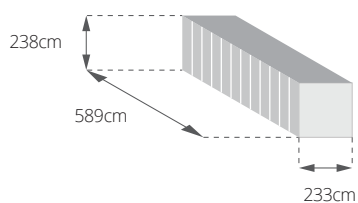
### 20 feet

#### with pallet

Retail Box	8640
Master Box	360
Pallet	10

#### without pallet

Retail Box	14280
Master Box	595



### 40 feet

#### with pallet

Retail Box	19008
Master Box	792
Pallet	22

#### without pallet

Retail Box	30240
Master Box	1260

