

A person wearing a red jacket, a grey and white striped beanie, and sunglasses is climbing a snowy mountain peak. They are carrying a large backpack and holding a rope. The background is a bright, hazy sky.

**GOAL0**™  
EXTREME

**BOULDER**™ 30m  
*Reference Guide*

Please read this guide BEFORE you use your gear!

## Input

30 watt mono-crystalline solar panel

## Output

Open circuit voltage: 18V

Charging voltage: 12.5V± 2V

## General

Product weight (no pkg) 6 lbs

Product dimensions 21" x 18" x 1"

Warranty Twelve months

## Operating Temperatures

Optimal Operating 32°-104°F

Optimal Storage 32°-86°F



Tested and certified

Before using your BOULDER 30M solar panel for the first time, please follow these simple steps.

1. Activate your warranty by registering your GOAL ZERO gear at <http://www.goal0.com/warranty>
2. Remove the protective film from the EXTREME panel.
3. Attach the BOULDER 30M securely to a fixed location.
4. Attach the BOULDER 30M power cable to the outlet box located behind the panel.
5. Plug the other end of the power cable to the INPUT port of the Ranger 350.




You are now ready to charge your power pack!

*Hint: The 's performance is enhanced if you occasionally adjust it's angle to follow the path of the sun.*

When you're off the grid you need to know how long it will really take to power up. You don't want numbers that come out of a laboratory based on perfect conditions. At GOAL ZERO all of our gear is field tested with an independent team of extreme adventurers that span from alpinists to ocean rowers. The charging times listed here come from countless hours of real world testing. That's why we call it TruWatt™ - real numbers you can count on.

The TruWatt™ Power Grid

### CHARGING TIMES (IN HOURS)

BATTERY			
Sherpa 50	1.5	4	14
Sherpa 120	4	10	32
Scout 150	4.5	12	40
Ranger 350	6	28	93

To achieve these charging time you will need a total of one Boulder 30M panel.

**POWER IT**

Highly efficient solar cells deliver up to 30 watts of power.

**ROUGH IT**

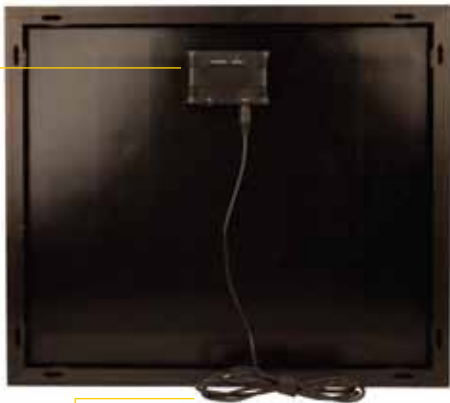
Durable and light aluminum frame.



LET IT HANG

Use brackets to secure and combine multiple BOULDER 30M panels.

CHAIN IT UP  
Chain multiple 30M's together to power EXTREME power packs faster.



POWER IT UP

Plug the power cable into the EXTREME power packs to charge them up.

**Q- Is the BOULDER 30M waterproof?**

A-Yes. The BOULDER 30M is waterproof and weather resistant. Just remember you are powering electronics and those devices may not be waterproof.

**Q- Does the BOULDER 30M deliver a full 30 watts?**

A-The BOULDER 30M can deliver up to 30 watts of power but the angle of the panels and cloud cover can impact its performance. Try to keep the BOULDER 30M out of the shade and adjust its angle to the sun as the day passes to maximize performance.

**Q- Can I chain multiple BOULDER 30M panels together?**

A-Yes. Simply connect each BOULDER 30M panel together with the power cables via the outlet box located on the back of each panel.

**Q- Will the BOULDER 30M panels break if dropped?**

A-The BOULDER 30M panels were built to last but avoid heavy impact which can cause weaken or even crack your panels.

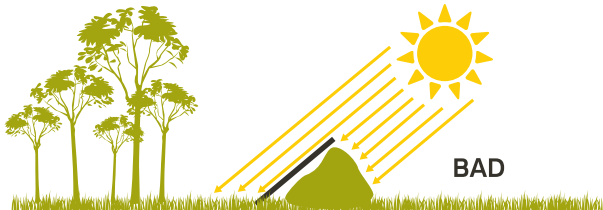
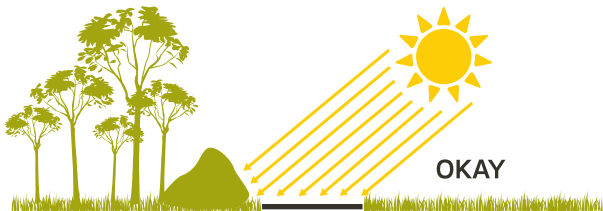
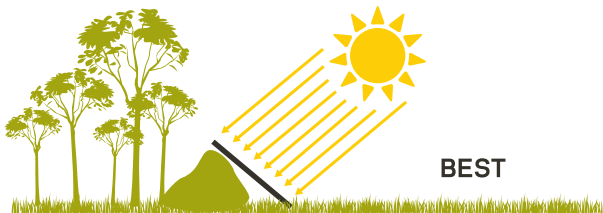
**Q- What kind of solar cells do you use in the BOULDER 30M?**

A-We use the latest mono-crystalline technology. Why? It provides more power per square inch than any other solar technology on the market.

# Collect Power from the Sun

**EXTREME**

Optimize the performance of your GOAL ZERO solar gear by angling it correctly to the sun.





### EXTREME POWER PACKS

When your mission is to maintain power for longer periods of time in the world's most EXTREME conditions, this power pack delivers exactly what you need to succeed.



### EXTREME SOLAR PANELS

When you are deep in the heart of nowhere, power and recharge your battery faster than ever with the technology of this 30 watt highly efficient mono-crystalline solar panel that can be linked to other panels for maximum energy.



### EXTREME INVERTER

Partner the Ranger UI with the Ranger 350 power to provide electricity to base camp. Complete with AC, USB, and DC outputs.



Available at [www.goalø.com](http://www.goalø.com).



## *Did You Know...*

By purchasing GOAL ZERO gear you are helping to sustain the philanthropic initiatives of Tifie Humanitarian. In fact, GOAL ZERO was originally created to provide light in schools and orphanages across Africa. We invite you to learn more about our charity of choice by visiting Tifie's website at:

[www.tifie.org](http://www.tifie.org)

Join Tifie and GOAL ZERO on **facebook**.

The logo for GOAL ZERO EXTREME features the words "GOAL" and "EXTREME" in a bold, sans-serif font. A yellow diagonal slash is positioned over the "O" in "GOAL". A small trademark symbol (TM) is located to the upper right of the "O".

**GOAL**<sup>TM</sup>  
**EXTREME**

Please call us at 888-794-6250  
if you have any additional questions.