#### Passive Energy Products

Environmentally and Financially Sustainable; do not rely on Hydrocarbons or Tax Credits

# UNIVERSAL TRACK RACK<sup>TM</sup>

#### PASSIVE SOLAR TRACKER FOR PHOTOVOLTAIC MODULES

Incorporating over three decades of tracker design and fabrication experience, the UTRF Series Tracker is our most popular design for large arrays. It features sturdy welded-steel construction, pre-assembled bolt-together components, sealed-axle ball bearings, heavy-duty shock absorbers, and early morning wake-up fin to catch the first sunlight of the day.

Our UTRK-040 and our UTR-020 are perfect for small PV systems and pumps.



ABC EXTREME MAKEOVER "YAZZIE FAMILY" HOME FEATURING ZOMEWORKS UNIVERSAL TRACK RACK<sup>TM</sup> MODEL UTRF-168 "THE EARLY BIRD'S VIEW" INSTALLED BY MARK SNYDER ELECTRIC





Universal Track Rack<sup>tm</sup> Model UTRK-040 Photo provided by Total Light and Power



# Simplicity and Elegance

Gravity turns the tracker, using the heat from the sun to move liquid from one side to the other side, to reliably track the sun's path from east to west. No motors, no gears and no controls to fail.

# Universal

Six standard UTR and UTR-F Track Racks<sup>™</sup> fit all common photovoltaic modules. Review our website for a complete list of products, specifications and prices.

# Easy to Transport

The Universal Track Rack™ is "knocked down" and packed in one to five packages. (depending on the size of the rack)

# SOLD THROUGH A WORLDWIDE NETWORK OF DEALERS

FOR MORE INFORMATION ON DEALERS, SIZING, PRICING, AND OTHER PRODUCTS
VISIT OUR WEBSITE

WWW.ZOMEWORKS.COM

### UNIVERSAL TRACK RACK<sup>TM</sup> PASSIVE SOLAR

#### TRACK RECORD

Zomeworks has been a leader in passive solar energy products since 1969. The Universal F-Series Track Rack™ is the latest in a long line of Zomeworks photovoltaic mounting structures. Since 1980, more than 17,000 Zomeworks tracking systems have been installed in different climates, on nearly every continent on earth. As dependable as gravity and as reliable as the heat of the sun, more than 99% of our trackers are still in operation today.

#### **COST EFFECTIVE**

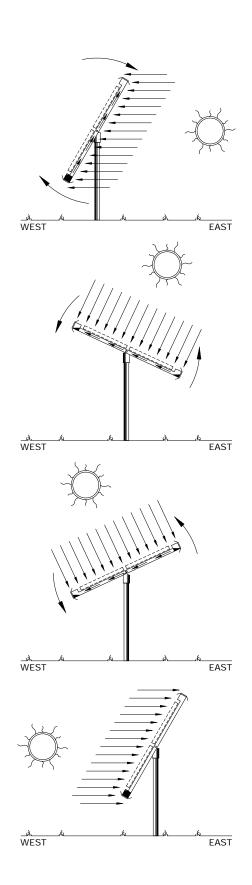
Zomeworks Track Racks™ increase electrical output of photovoltaic modules by 25% or more compared to modules on fixed mounts. A 12-module tracking system delivers the same electric output as 15 modules mounted on fixed racks - a savings of three modules.

Track Racks™ are highly cost-effective components for domestic and industrial photovoltaic power systems, water pumping systems, cathodic protection systems, and utility applications.

<u>SIX SIZES FIT ALL</u> Zomeworks UTR-020, UTRK-040 and UTRF Series combine the ingenuity, dependability, and practicality that represent Zomeworks' products with a universality of application that reduces the cost and simplifies the installation of solar systems.

Our six standard sizes hold 2-16 modules. All Universal Track Racks™ will accommodate most PV modules on the market.

These trackers come packaged as a kit with all hardware and instructions for quick assembly. Because just six basic sizes cover the entire range of needs, Zomeworks and its distributors are able to eliminate most special order delays.



How the Universal Track Rack™ Follows the Sun...

The UTR begins the day facing west. As the sun rises in the east, it heats the unshaded west-side canister, forcing liguid into the shaded east-side canister. As liquid moves through a copper tube to the east-side canister, the tracker rotates so that it faces east.

The heating of the liquid is controlled by the aluminum shadow plates. When one canister is exposed to the sun more than the other, its vapor pressure increases, forcing liquid to the cooler, shaded side. The shifting weight of the liquid causes the rack to rotate until the canisters are equally shaded.

As the sun moves, the rack follows (at approximately 15° per hour), continually seeking equilibrium as liquid moves from one side of the tracker to the other.

The rack completes its daily cycle facing west. It remains in this position overnight until it is awakened by the rising sun the following morning.

#### **ZOMEWORKS CORPORATION**

ESTABLISHED 1969