

# RapidRac<sup>®</sup>

## PV's Flat Roof Ballast Solution



Roof Mounted  
Solution

Unirac's Headquarters  
© 2008, courtesy of Unirac Inc.

### Unirac's new improved RapidRac is the best commercial flat-roof solution for the PV Mounting industry.

With minimal parts, reduced labor expenses and the versatility to accommodate a wide range of modules, RapidRac is one of the fastest, easiest and most cost-effective ballast solutions on the market today.

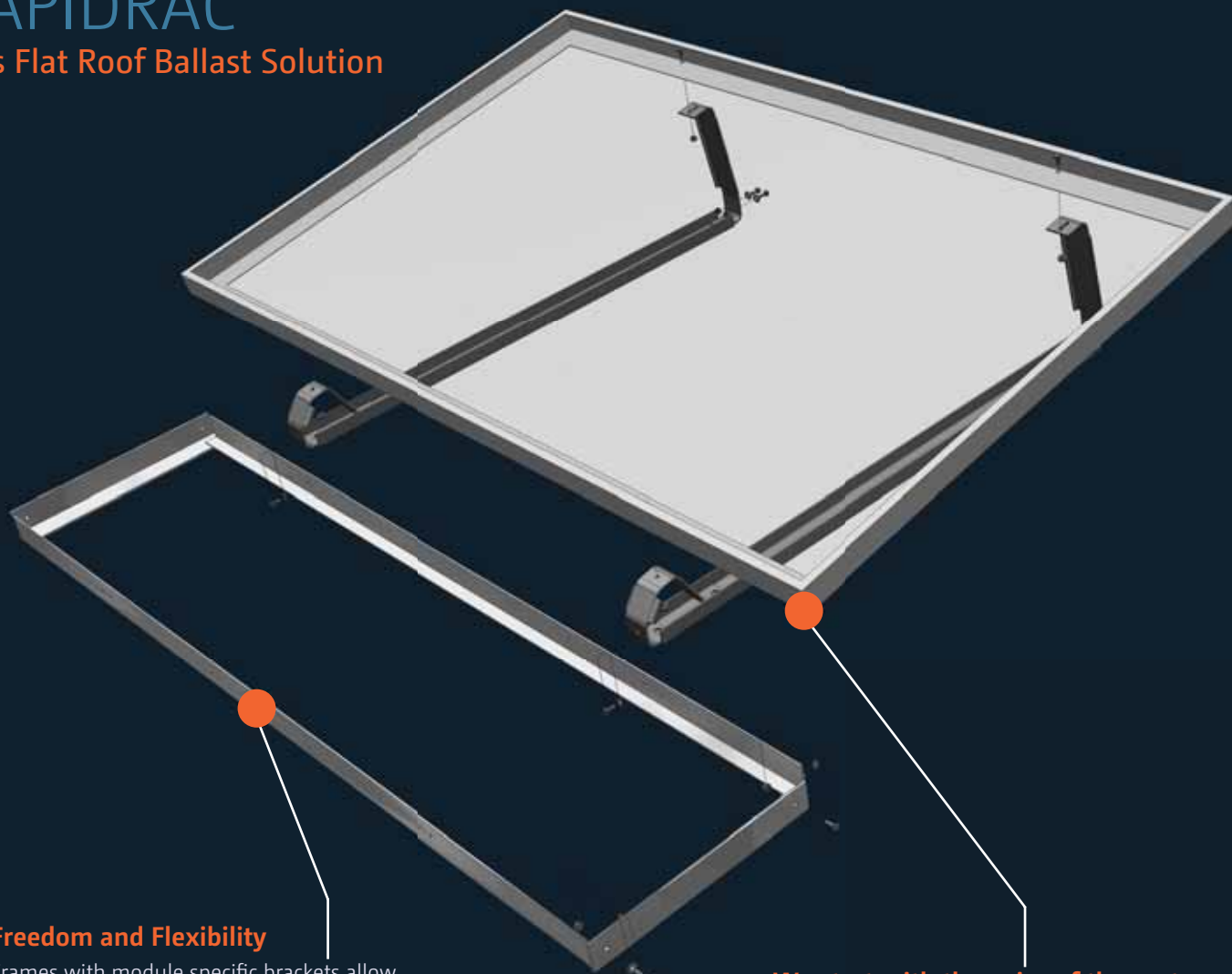
Accompanied by a technical support system that provides complete installation and code compliance documentation, an on-line estimator and design assistance, Unirac continues to deliver engineered technology, designed with experienced customer input, to deliver industry-leading mounting solutions.



Visit us online at [www.unirac.com](http://www.unirac.com)

# RAPIDRAC

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### **Freedom and Flexibility**

Frames with module specific brackets allow installers to mount a variety of structures and PV modules. RapidRac can be installed as light as 2lb/ft<sup>2</sup> with zero penetrations.

### **We start with the voice of the customer**

Unirac collaborated with installers and system integrators to provide advanced engineering without unnecessary complexity for this flat roof ballast solution. RapidRac requires only one wrench and 7 parts to install which benefit the installer with faster installation and reduced labor expenses.

## **The RapidRac was developed through significant computational fluid dynamics and wind tunnel engineering.**

The efficient design, built at a fixed degree tilt angle, optimizes natural convective cooling of the modules and was designed to meet the requirements of current applicable building codes.

In a recent time trial, a three-man crew using hand tools installed 3kW of RapidRac in 1 hour, or 1kW per man hour. The electrical contractor crew had never installed RapidRac before and had only 30 minutes to review the installation manual.

Unirac has recently added a laminate option making RapidRac more versatile than ever.

The Laminate option is capable of mounting two frameless solar modules, greatly reducing overall racking costs.

# RAPIDRAC

## Component Information

### Frames



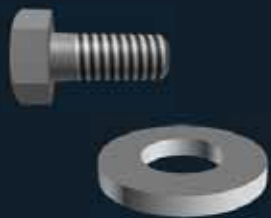
Aluminum module mounting frames support modules attached to module brackets. Frames can be offset to accommodate roof structures such as air conditioners.

### Module Brackets



Module brackets secure modules to bay frame and are specifically designed for your project's desired tilt angle, eliminating time-consuming adjustments. Integral PEM nuts are attached to brackets to speed installation.

### Hex Bolt, Flat Washer and Serrated Flange nut



Universal hardware speeds installation by eliminating parts and confusion. Use one stainless steel hex bolt, washer and flange nut per connection of module bracket to frames. Only a hex bolt and washer are required for modules connections to brackets.

### WEEB 9.5 Grounding Clip



Save time and materials by eliminating the need to tediously install a grounding lug on each module and bare copper wire between all modules. Instead, simply use the WEEB 9.5 with hex bolts and washers during assembly on frame holes facing in towards the array. The nibs of the WEEB 9.5 pierce the anodizing as the mounting nuts are tightened, creating a ground path through the module brackets and frames.

# KEY BENEFITS

## of RapidRac

### Speed of Installation

- Significantly reduce installation time
- Installs in less than half the time of competitive products
- Installation guide is only four pages

### Simplicity

- Requires only 7 parts to install
- Only 1 wrench required
- No unnecessary complexity
- Advanced engineered

### Versatility and Choice

- Offers freedom and flexibility to accommodate majority of PV modules
- Flexibility of design to meet all weight, height and wide range of wind conditions
- Offers trade-off versatility between penetrations and roof load
- Can be installed as light as 2lb/ft<sup>2</sup> with many penetrations, or may be installed with zero penetrations (with higher roof loading)

### Value

- Price per watt is competitively priced
- Estimated labor savings of up to \$10k on 250kw project

# Bright Thinking in Solar



## Code Compliant

The RapidRac system is PE certified. Call Unirac or visit [www.unirac.com](http://www.unirac.com) for documentation applicable to your building code.

## Component Specifications

6061-T6 and 6105-T5

- 1-bay frame

5052-H32 aluminum sheet

- Module bracket

18-8 stainless steel

- Fasteners

## Warranty

RapidRac is covered by a 10-year limited product warranty and a 5-year limited finish warranty. For complete warranties, download the RapidRac installation manual at [www.unirac.com](http://www.unirac.com).



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