



## SunWize® Grid-Tie Systems

### **Complete, Engineered, Packaged Solar Electric Systems**

Finding ways to reduce cost and streamline operations is imperative in today's increasingly competitive world of residential solar installation. Traditionally, residential solar electric systems involve design, documentation, sourcing of individual components, off-site receiving and staging, and one-of-a-kind on site installation. This method is complex, prone to error, and time consuming. SunWize Grid-Tie System packages are a superior approach, saving photovoltaic (PV) installers substantial time and money. Here's how:

#### **Complete, Packaged Kits: Delivered to the job site using a single part number**

Everything needed is included. Time and effort is saved by not having to generate a bill of materials and order multiple items. A single part number gets the whole system shipped right to the customer's driveway with no staging or double handling. Moreover, it eliminates the possibility of errors in ordering or in loading the truck. The job never comes to a halt because something is missing.

#### **Engineered Systems: Proven reliability and permit-ready**

SunWize Grid-Tie Systems are fully engineered and documented systems. They are proven, standard systems that free installers from having to design and engineer a system, and generate drawings. Installers have everything they need to obtain a permit and facilitate an inspection. The resources usually expended in design, engineering and documentation can go right to the bottom line or be redirected to revenue generating activities.

#### **Standard Systems: Increased installation efficiency**

Grid-Tie Systems stay the same. Crews that continually work with Grid-Tie Systems quickly move through the learning curve and become very skilled and swift in their installation.

#### **No Hidden Costs: Free delivery and no surcharges**

Delivery is included and there are no handling charges.

#### **Module and Balance of System Availability: No waiting**

Many manufacturers are back-ordered and cannot ship until months after an order is placed. SunWize Grid-Tie Systems are in-stock and ship one day after receipt of your order. Having modules and balance of system components available improves cash flow and increases customer satisfaction. The revenue from booked business is realized more quickly. More importantly, the customer does not have to wait to start receiving the benefit of their PV system.

#### **Broad Range of Systems: Choose from Over 300 configurations**

Dealers select a given system size using a wide variety of module and inverter options. There is a configuration for virtually every residential customer situation.

#### **SunWize Grid-Tie System Packages**

SunWize Grid-Tie Systems contain high quality, UL listed components. Every component needed for a successful installation is included in the package. In addition to modules and inverters, each package includes SolarMount™ flush PV racks, and necessary hardware and electrical components. The installer supplies the wiring from the solar array to the main panel and lag bolts. Packages also include complete documentation, an installation guide and operation/owner's manual.



Multiple systems can be installed for higher power output and systems may also be expanded in the future as budget or electrical requirements grow. Grid-Tie System packages can be installed on any type of composition or tile roof. The array is securely attached to the roof of the building with the mounts in compliance with US building codes.

Some SunWize Grid-Tie Systems are certified by the Florida Solar Energy Center (FSEC) for high quality, reliable and safe operation compliant to the NEC. The FSEC certificate is useful for permitting and the field inspections of installed systems.



## SunWize® Grid-Tie Systems

SunWize Grid-Tie System packages allow you to choose from a multiple selection of solar modules matched with a variety of grid-tie inverters. Your pre-engineered SunWize Grid-Tie System will include:

1. **Solar Modules** - choose one of the following:

- Sanyo 190W or 200W • Sharp 175W, 176W, 198W or 224W • Kaneka 60W. Solar modules are supplied equipped with “MC” type interconnects.

2. **UniRac® SolarMount™** code-compliant, flush PV mounting structure of clear anodized aluminum including rail set with L-feet and attachments for shingle roofs, top-clamps and splice kits. Adjustable tilt leg sets for mounting to horizontal surfaces are sold separately. Systems using the Sharp 176W and 198W modules are installed with the **Sharp OnEnergy mounting system**.

3. **Outdoor-rated Grid-Tie Inverter** with LCD digital output display- choose one of the following:

- Xantrex GT series with integrated AC/DC disconnect switch • SMA-Sunny Boy series with integrated AC/DC disconnect switch and 4 PV string fused combiner • Fronius IG series with a pre-wired SunWize Power Center consisting of an aluminum back panel, NEMA 3R, AC and DC disconnect switches. The Power Center is designed to facilitate easy on-site installation of the inverter. There is an optional digital kWh meter with socket box (Part # 400010). Inverters come with standard 10-year warranties. Fronius offers the option to extend the warranty to 15-years.

For three-phase installations, many SMA inverters are field configurable for 208 or 277 AC output voltage, (see selection table). More Grid-Tie Systems for 208Vac versions are available with Fronius IG or Xantrex GT inverters. See SunWize web site for details.

4. **Wiring** – Includes #10 AWG MC interconnect extension sub-array cords, wire management system with cable ties and wire clips, PV copper grounding lug system, PV fused combiner (if needed) and array wiring pull boxes. The home-run wiring from the solar array to the main panel is supplied by the installer.

6. **Documentation** – Includes electrical drawings, data sheets, warranties, installation instructions and owner’s manual.

The following selection guide is a partial listing of Grid-Tie System packages. It contains the highest power module of different manufacturers used in a variety of configurations in combination with a variety of inverters. Please refer to the current SunWize dealer price list for a complete listing of all available SunWize Grid-Tie Systems.



Everything needed for a successful installation is included in the SunWize Grid-Tie System package

Sample of SunWize Grid-Tie System Configurations

GTS Model Part #	PV Module Model	PV # Series x Parallel	Array Power (STC Watts)	Array Power (CEC Watts)	Inverter Model	Inverter Power (kW)	Output Vac
999GTS637	Sanyo 200	5 x 2	2000	1887.0	Fronius IG2000	2.0	240
999GTS642	Sanyo 200	5 x 3	3000	2830.5	Fronius IG3000	2.7	240
999GTS645	Sanyo 200	5 x 4	4000	3774.0	Fronius IG4000	4.0	240
999GTS651	Sanyo 200	4 x 7	5600	5283.6	Fronius IG5100	5.1	240
999GTS652	Sanyo 200	7 x 1	1400	1320.9	Xantrex GT2.8	2.8	240/208
999GTS654	Sanyo 200	6 x 2	2400	2264.4	Xantrex GT2.8	2.8	240/208
999GTS656	Sanyo 200	5 x 3	3000	2830.5	Xantrex GT2.8	2.8	240/208
999GTS657	Sanyo 200	6 x 3	3600	3396.6	Xantrex GT3.3	3.3	240/208
999GTS659	Sanyo 200	7 x 3	4200	3962.7	Xantrex GT4.0	4.0	240/208
999GTS664	Sanyo 200	5 x 3	3000	2830.5	SMA SB3000US	3.0	240/208
999GTS667	Sanyo 200	7 x 3	4200	3962.7	SMA SB4000US	4.0	240/208
999GTS668	Sanyo 200	6 x 4	4800	4528.8	SMA SB5000US	5.0	240/208/277
999GTS670	Sanyo 200	6 x 5	6000	5661.0	SMA SB6000US	6.0	240/208/277
999GTS672	Sanyo 200	6 x 6	7200	6793.2	SMA SB7000US	7.0	240/208/277
999GTS673	Sanyo 200	7 x 4	5600	5283.6	Xantrex GT5.0	5.0	240/208
999GTS674	Sanyo 200	6 x 4	4800	4528.8	Xantrex GT5.0	5.0	240/208

Add Z – for packages without mounting structure. Contact SunWize sales rep for tile roof mounting accessories.

NOTE: GTS packages are designed for best operation in regions with average ambient temperatures from 5°F to 104°F.

