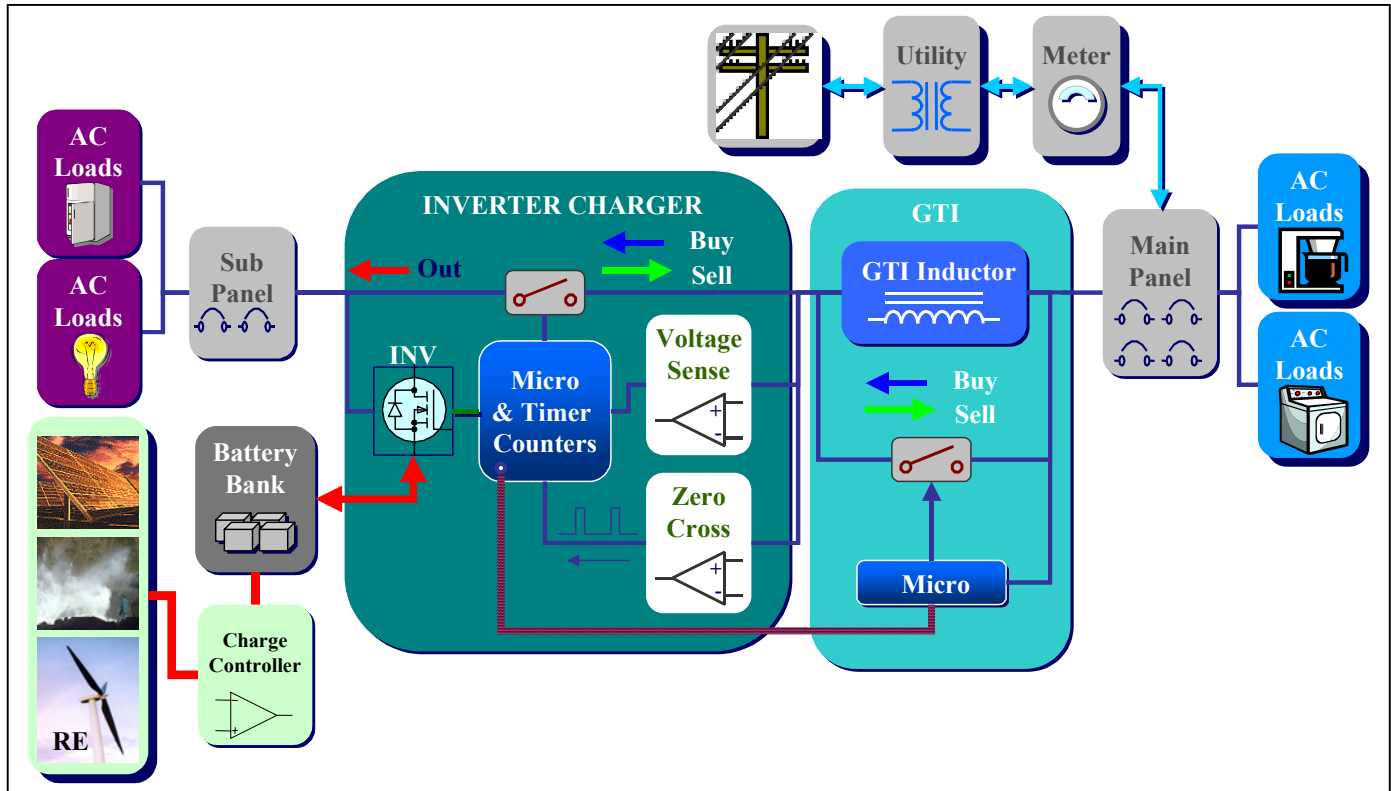


Introducing the Grid Tie Interface (GTI)

MSRP \$449.00

[View GTI Data Sheet](#)

The Grid Tie Interface (GTI) is an integrated assembly used with the Trace™ SW Series II inverter/charger with Revision 4.2 software. This new device provides active anti-islanding detection along with side benefits such as reducing voltage and current total harmonic distortion (THD) below the test requirements. Anti-islanding and THD testing is described in the IEEE-929-2000 and UL-1741-2000.



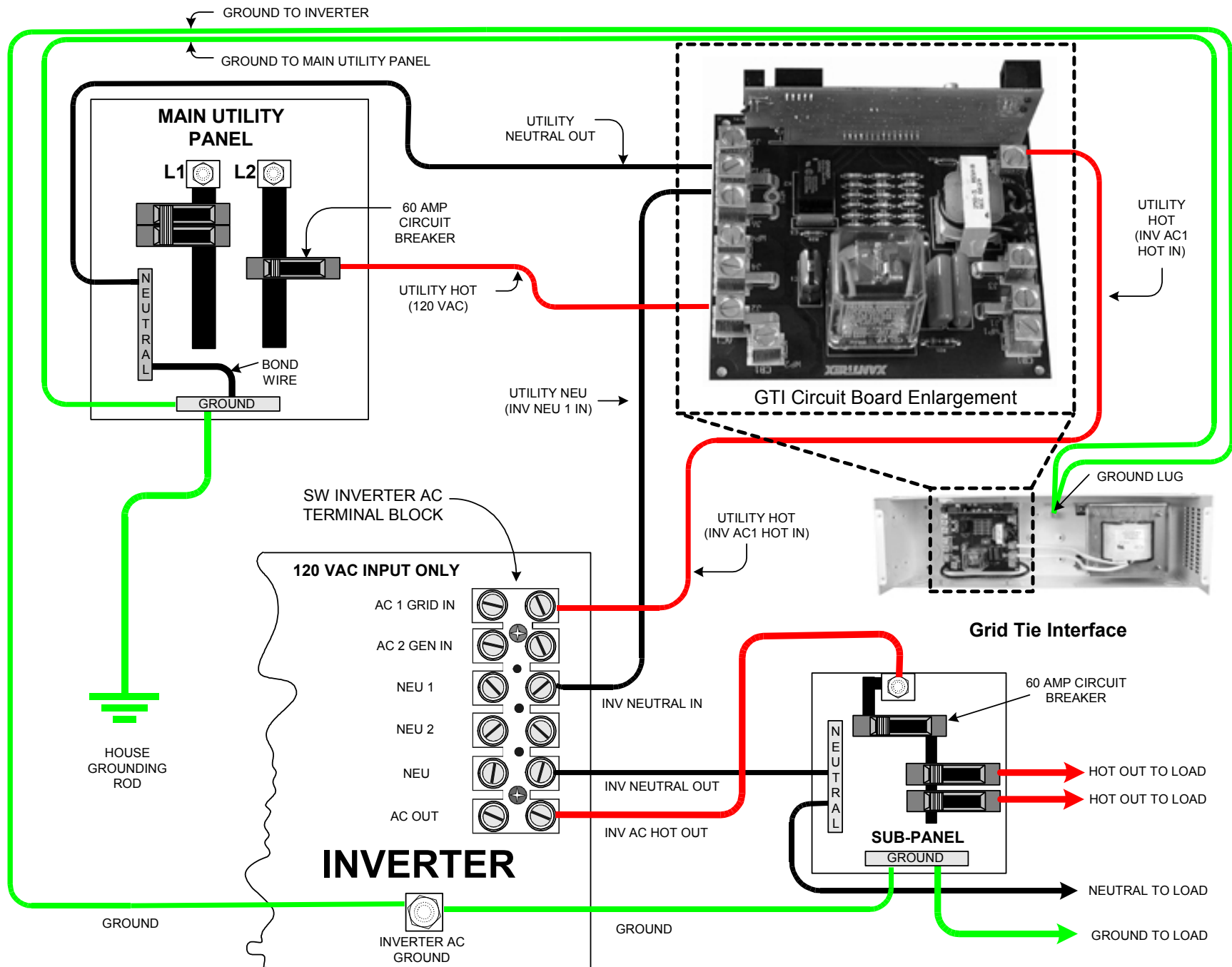
The Grid Tie Interface is an accessory, which is connected between the grid and the SW Series II inverter to optimize the "SELL" feature. While there is a small inductor in the GTI, this device is not a "filter"; rather it contains an additional control microprocessor, which connects to the SW Series II with a communications cable. (The 3-foot wire and connector to attach the GTI is found in the wiring compartment of new production SW units with Revision 4.2 software).

When the GTI is connected and the Inverter "SELL" mode is selected, the microprocessor of the GTI takes control of the SW Series II and operates the inverter "SELL" feature. The GTI affords a dedicated microprocessor and new, sophisticated control algorithms that are able to optimize the sell function. The SW Series II /GTI meets all power quality requirements of UL1741, including harmonic distortion and power factor. Full compliance with anti-islanding requirements to IEEE929 and UL1741. In addition, it has increased the SW Series II's efficiency in SELL mode to within 1% of the impressive off-grid efficiency of the SW.

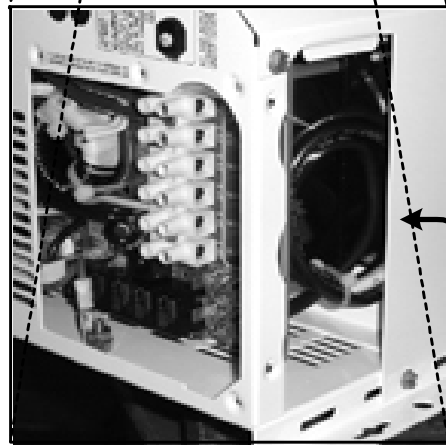
The GTI also contains an automatic transfer/shorting relay, which the SW Series II uses to disconnect the GTI from the circuit when it is not needed, for example when the SW Series II is charging batteries from the grid. This is also used to disconnect the GTI so that it does **NOT** represent a phantom load or parasitic loss to the system.

During a blackout or any time the SW Series II is powering house loads directly, the GTI is not in the power circuit and thus does not represent an efficiency loss.

All new SW Series II units (shipped since December of 2001) are equipped to allow the GTI to be installed in the field. The SW Series II inverter is certified to UL1741 for off grid and backup power applications. The SW can be connected to the grid as a battery charger; however, it is **NOT** approved to use the SELL feature (net meter) without the GTI accessory. The GTI carries all necessary approvals and markings to allow a safety inspector to approve the installation for net metering.



**SW Series II
Inverter/Charger**



**Communications cable
location
within inverter**

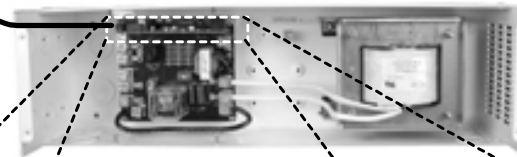
*The communications
cable will be located
directly behind the AC
terminal block.*

*The loose end of the
communication cable will
be connected to the
communications cable
port on the GTI circuit
board.*

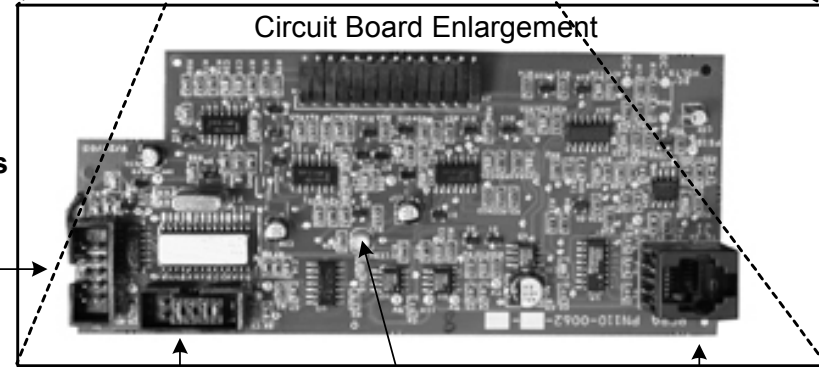


**SW Series II
Inverter/Charger**

**Communications
Cable**



**Grid Tie
Interface**



Circuit Board Enlargement

**Communications
Cable Port**

Jumpers configured at
time of manufacturing.
DO NOT ALTER!

AMBER
LED

Not Used
at this
time.