MAXIMUM POWER TRANSFER SOLUTION - MPTS

MPTS is a perfect combination with Alternate Power

If you are designed a large solar installation to offset your usage then this design would make your Solar System get significantly smaller

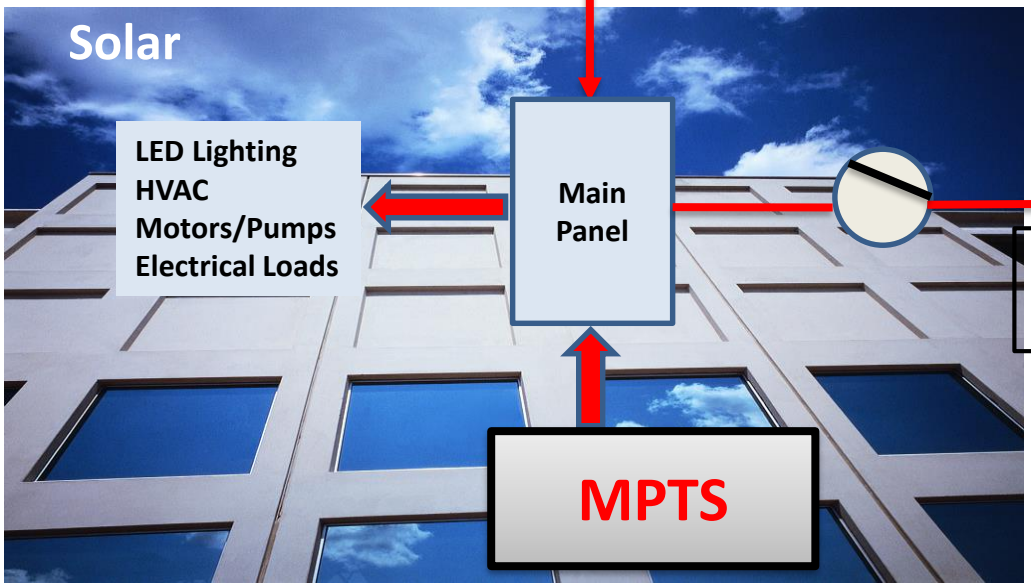
If you already have Solar, then surplus power (kWh) that is sent back to the grid increases by 20 percent when you install MPTS, see below.





During power outages, the Solar power along with batteries will be used to provide power to the building or for mission critical loads inside the building.





Solar Power Surplus is 20,000 KWH Without MPTS

Solar Power Surplus is 24,000 KWH With MPTS

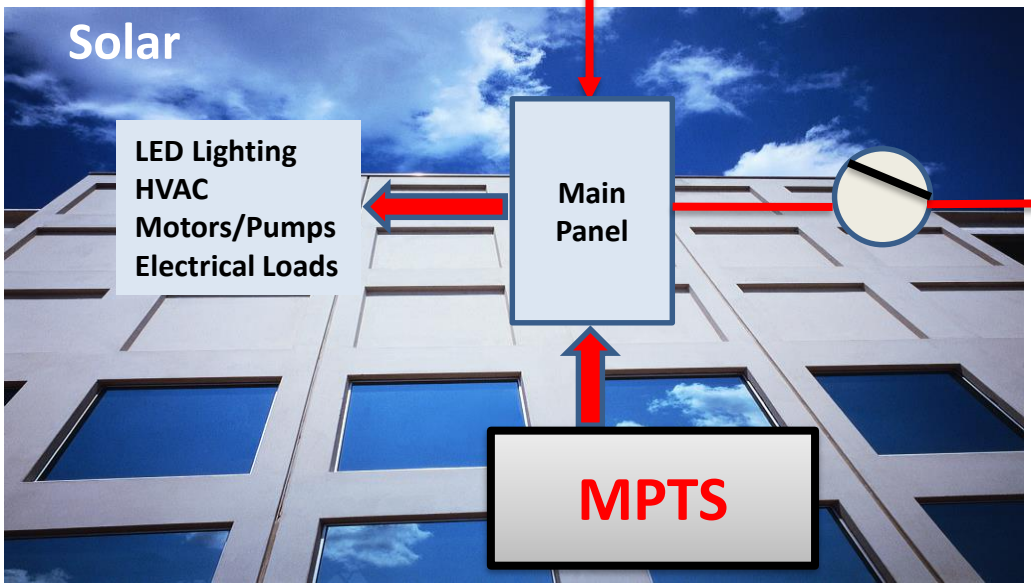
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MPTS is a perfect combination with Alternate Power



During power outages, the Solar power / alternate power will provide power to the building or for mission critical loads inside the building.





Utility
Meter



MAXIMUM POWER TRANSFER SOLUTION - MPTS

MPTS is a perfect combination with Solar & LED Lighting Solutions

Harmonic Voltage Limits – IEEE 519-2014

IEEE created new limitations on harmonics in 2014 because it is becoming a huge problem.

5.1 Recommended harmonic voltage limits

At the PCC, system owners or operators should limit line-to-neutral voltage harmonics as follows:

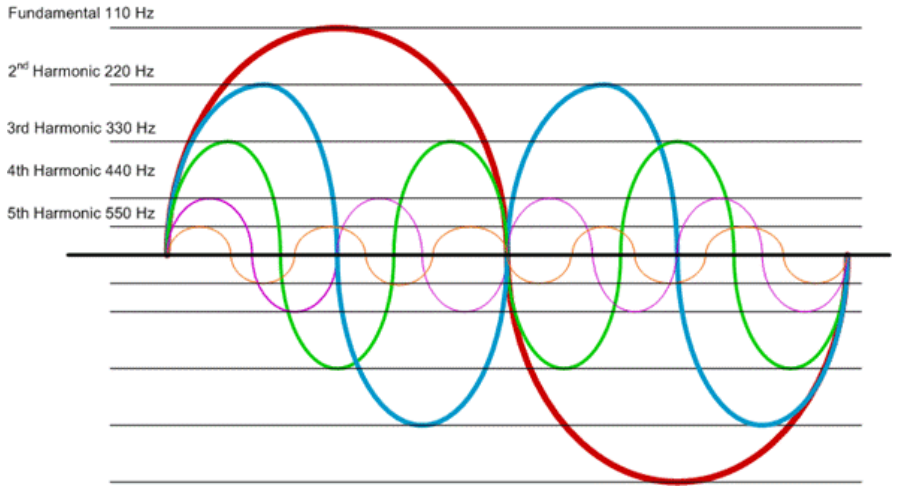
— Daily 99th percentile very short time (3 s) values should be less than 1.5 times the values given in Table 1.

— Weekly 95th percentile short time (10 min) values should be less than the values given in Table 1.

Table 1—Voltage distortion limits

Bus voltage V at PCC	Individual harmonic (%)	Total harmonic distortion THD (%)
$V \leq 1.0$ kV	5.0	8.0
1 kV < $V \leq 69$ kV	3.0	5.0
69 kV < $V \leq 161$ kV	1.5	2.5
161 kV < V	1.0	1.5[a]

Solar, LED lights and other energy efficiency devices create harmonics as a side effect. Harmonics cause all kind of problems to your electrical equipment in the building.



MPTS reduces harmonics (TDD) that damage your investments in all your electrical equipment.

MAXIMUM POWER TRANSFER SOLUTION - MPTS

Benefits from MPTS

- **Decrease** Amps significantly
  - Avoids Overload conditions and hot spots in panels and equipment
  - Decreases kWh usage by decreasing I^2R losses
  - Creates capacity for more breakers in your panels

- **Maintains** stability of voltage and current in building
  - Eliminates flickering lights, popping breaker or failing power supplies
  - Increases life of connected equipment

- **Protects** investment in electrical and mechanical equipment.

- **Reduce** service, repair, replacement, and maintenance costs

- **Reduce** total electrical power demand and consumption

- **Reduce** C02 Emissions

Significant Reduction in CO2 Emissions