InfraSuite Manager Introduction Functional Module: PUE Energy

External Customer 05/03/2017 Delta / MCIS/ Jesse

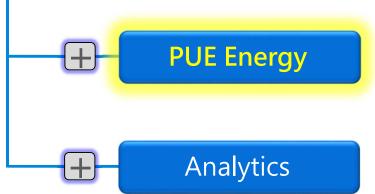




InfraSuite Manager Functional Modules







PUE Energy(5063057500) functional module has implemented the energy measurement, PUE calculation, electricity tariff formula, energy report and historical data analysis.



PUE Energy Module Spec.

Measurement

- •Power Meter Protocol: Support RS232/485 Modbus ASCII/RTU, Modbus TCP \ SNMP.
- •Virtual Power Meter: Can reference any device protocol items to generate the energy value.
- •The energy value is automatically summarized as hour, day, week, month and year.

PUE Calculation

- The power usage can be classified(e.g. Total, IT, cooling, UPS, Illumination, others).
- •The PUE formula is based on the classified power usage.
- Meet the PUE measurement level 1, 2, 3 and period 'Y', 'M', 'W', 'D'.
- •The PUE component in the layout plan displays the value for : real-time, this hour, today, this week, month to date and year to date.
- •Easily to query and display the PUE history data by line or bar chart.

► Electricity Tariff Formula

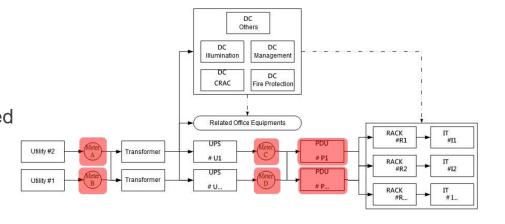
- Tariff formula can be configured for multiple time segments.
- Can configure the basic and floating tariff formula, overload fine and power factor reward.
- Can define the summer season, holiday, weekend and working days for a tariff formula.



Energy Application for Datacenter

▶ Equipment

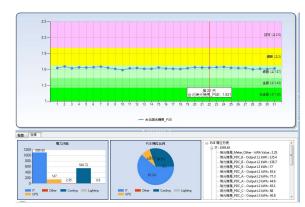
- Energy module installs in the same EMS3000 host.
- Based on the PUE measurement level, install the power meter, PDC or PDU.
- If the chiller, cooling tower and pump are not measured by a power meter then please install the flow meter and temperature sensors for monitoring the input and return water.



▶ Function

- Classify the energy usage in a datacenter.
- Calculate the datacenter PUE, power consumption and cooling capacity.
- Calculate the PUE, power consumption and cooling capacity fro each room in a datacenter.
- •PUE component: real-time, day, week, month and year.
- Query the history PUE data by line or bar chart.
- Each rack can calculate its power consumption.

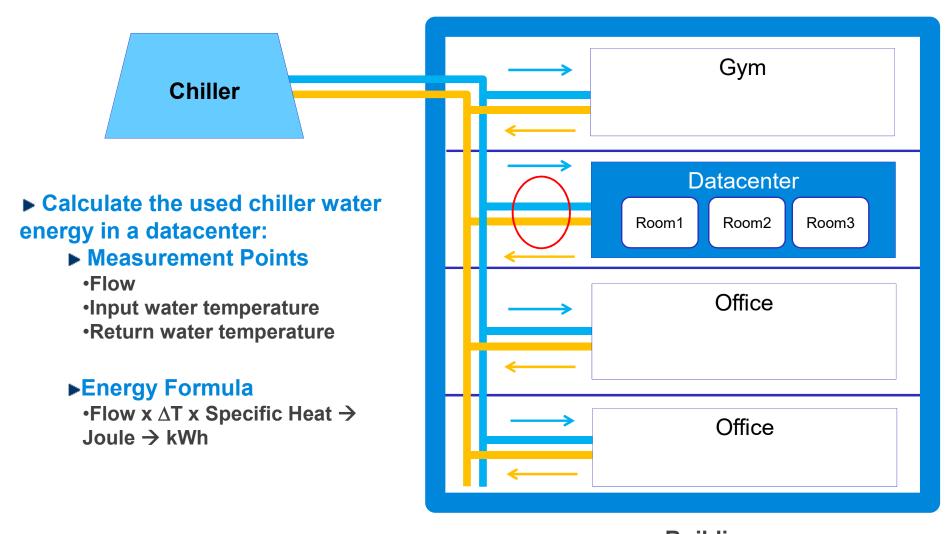






Energy Calculation by Sharing The Same Chiller

- ► Use a virtual device to simulate a power meter
 - Purpose: To provide the kWh value for the energy usage which cannot just install a power meter.



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