

What Type Of Submetering Is Right For Me?

What Kind of Submeter Do I Need?

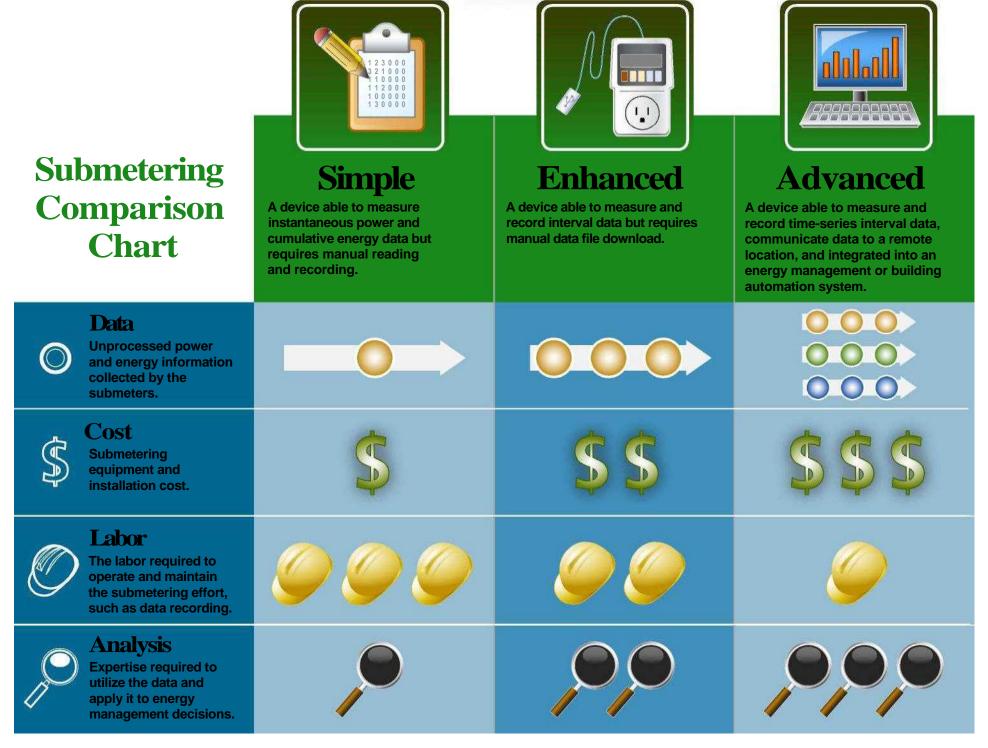
This simple guide allows you to compare the strengths and limitations of available low-to-moderate cost submeter types so you can match tool capabilities to your project goals. The variety and capability of device-oriented electrical submeters is expanding. But increased options make it more challenging to choose the most effective tool.



When Might Submeters Be Helpful?

Submeters help Facility Managers, energy managers and tenant organizations identify:

- 1) inefficient equipment;
- 2) use and configuration alternatives; and
- 3) equipment and user profile management opportunities.



Goals, Devices, Submeters, And Benefits

Goal	Types Of Applicable Devices	Submeter Type	How You Use It
Identify inefficient equipment	Productivity Equipment Printers, copiers, fax machines and their configurations.	All	Inform equipment replacement priorities and alternative configurations.
Understand use and configuration	Kitchen Refrigerator, water heater, coffee makers, and dishwashers. Configuration and occupant use profiles.	Enhanced & Advanced	Realign operation and maintenance priorities and inform equipment replacement. Identify alternative configurations and engage tenants on conservation efforts.
Develop equipment and user profile opportunities	Workstation Laptop, monitor, phone, and task lights. Different user profiles (research, admin and managers).	Enhanced & Advanced	Quantify energy use, compare products, and inform equipment purchase and issues. Evaluate equipment configurations, peak use profiles, and demand management practices.

Key References:

- ~ Lobato, C., Pless, S., Sheppy, M. and Torcellini, P., "Reducing Plug and Process Loads for a Large Scale, Low Energy Office Building: NREL s Research Support Facility," NREL/CP-5500-49002, National Renewable Energy Laboratory, February 2011. Available online at http://www.nrel.gov/docs/fy11osti/49002.pdf
- ~ National Renewable Energy Laboratory, "Assessing and Reducing Plug and Process Loads in Office Buildings." Available online at http://www.nrel.gov/docs/fy11osti/51199.pdf
- ~ Pacific Northwest National Laboratory, "Building Cost & Performance Metrics: Data Collection Protocol, PNNL-18325, March 2009. Available online at http://www.pnl.gov/main/publications/external/technicalreports/PNNL-18325.pdf
- ~ Stoeckle, Adam, Joel Loveland, and Rob Peña, Plug Loads and People: Observations and Analysis from the Field (DRAFT), 2012 Summer Study on Energy Efficiency in Buildings, American Council for an Energy-Efficient Economy, Integrated Design Lab, University of Washington, College of Built Environments, Department of Architecture, February 14th, 2012.