CYBER SWITCHING®

CS-400 SMART SUBMETERING SYSTEM

A Title 24, Smart Submeter solution, the CS-400 offers ease of installation and cost-effective performance for commercial metering and monitoring, in both new and retrofit applications.

Designed for performance at an unprecedented price point, the CS-400 solution provides capabilities and performance which, until now, has only been available in significantly more costly meters. The CS-400 advanced submetering solution is comprised of modular components to efficiently meet requirements in all applications:

- CS-400-MM Submeter module
- CS-400-CT Split core CT coils
- CS-400-SH Submeter Hub
- CS-400-SG-200 ePower Gateway

MODULAR DESIGN

The CS-400-MM Submeter module provides a full complement of electrical parameters to monitor and characterize energy usage. The unique design of the CS-400-MM has enabled it to be UL listed for field installation in electrical cabinets. Integral 14 gauge voltage sense wiring can be connected directly to a subpanel circuit breaker, while integral CT coil wires eliminate the cost and time to run electrical conduit to the meter. The meter module utilizes a single RJ45 network connection that is fed through a standard enclosure knockout connected to its panel mount RJ45, so all external wiring is low voltage Cat 6. The module boots up and begins measuring with ease.

ENERGY MANAGEMENT

The CS-400 submetering solution enables facility professionals to proactively manage their energy usage programs to minimize utility demand charges on an ongoing basis and reduce average energy costs. Options such as the Tenant Billing modules, part of the Cyber Switching software suite, provide robust capabilities for accurately recording and recapturing tenant energy costs.

CS-400 SUBMETERING SOLUTION

- Code compliant kWh submetering
- Reports
  - Total energy in kWh, resettable
  - Amperage and voltage for phases A/B/C
  - Real time load, kW
  - Demand: kW at 15 minute intervals: kW peak at 15 min intervals
- Share voltage from 1 meter to 7 meters without the need for additional breakers
- Tenant billing package
- System has onboard EMC, data storage and integral network router
- Configurations available to monitor three phase systems or as a multipoint system with independent reporting of up to 6 current channels and 3 voltage channels
- Engineered for streamlined installation and easy startup

SECURE OPERATION

The CS-400-SH submeter hub resides outside the electrical subpanel, connected to the meter module via the RJ45 jack. It is capable of connecting to eight submeter modules.

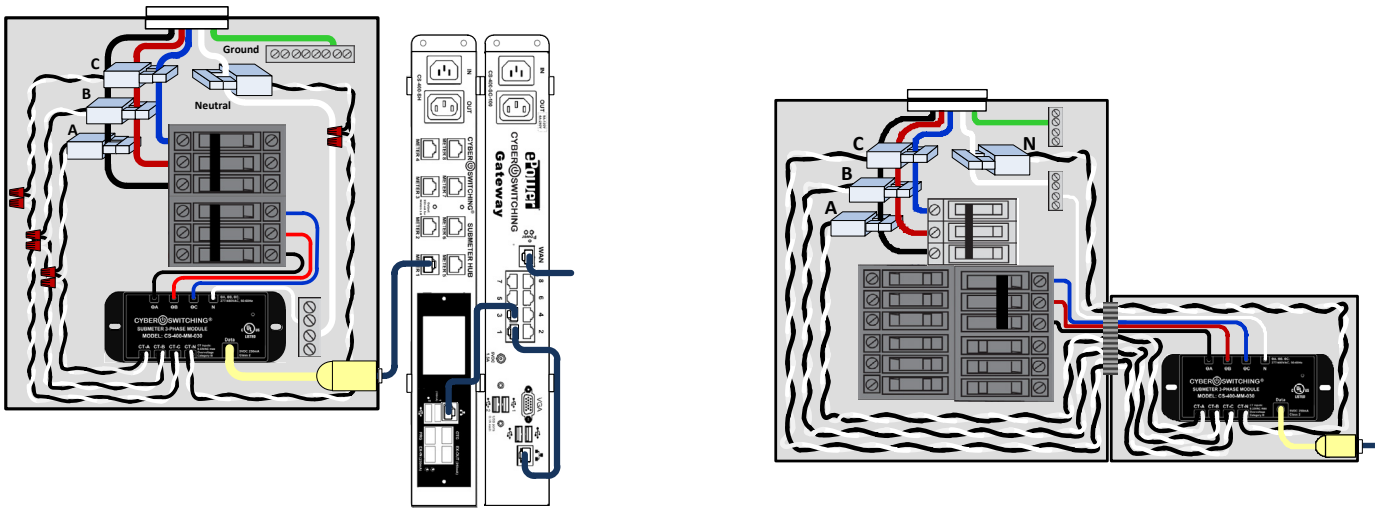
Because the CS-400 submetering solution requires no external high voltage wiring or CT coil conduit, installation time and cost is significantly reduced.

The CS-400-SG Gateway provides global monitoring of all connected CS-400-MM meter modules via the submeter hub. It utilizes Cyber Switching's Energy Management and Control (EMC) software to provide comprehensive monitoring analytics and report generation for optimal energy management decisions. Each Gateway can manage 200 metering points with an additional network switch, and connect seven Hubs directly.

SYSTEM COMPONENTS

PRODUCT NUMBER	PRODUCT DESCRIPTION
CS-400-MM-030	Three-Phase Smart Submeter Module
CS-400-MM-060	Multipoint Smart Submeter Module
CS-400-CT050	Split core CT Coil, 50 Amp
CS-400-CT100	Split core CT Coil, 100 Amp
CS-400-CT300	Split core CT Coil, 300 Amp
CS-400-CT600	Split core CT Coil, 600 Amp
CS-400-SH-3P	Three-Phase Submeter Hub
CS-400-SH-MP	Multipoint Submeter Hub
CS-400-SG-200	ePower Gateway with EMC 200 points with 1 year support and software upgrades
CS-400-SG-200R	Renewable 1 year package EMC support and software upgrade
CS-400-SG-200TB	ePower Gateway with EMC Tenant Billing package, 200 points, 1 year support/software upgrades
CS-400-SG-200TBR	Renewable 1 year package EMC Tenant Billing package support and software upgrade

SYSTEM INSTALLATION AND ARCHITECTURE



The CS-400 system metering module can be installed either directly into an electrical cabinet (above left) or into an accessory enclosure adjacent to an electrical panel (above right).