

## CS-400 ADVANCED SMART SUBMETERING SYSTEM

**A third-generation 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-100 ePower Gateway

### MODULAR DESIGN

The CS-400-MM Submeter module provides a full complement of electrical parameters to monitor and characterize energy usage, including power quality, and THD. 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.



### 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 (EMC3) software to provide comprehensive monitoring analytics and report generation for optimal energy management decisions. Each Gateway can manage 25 Hubs with an additional network switch, and connect seven Hubs directly.

### 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.

Out of the box, the CS-400 is integration-ready with the comprehensive Cyber Switching Demand Response Solution.

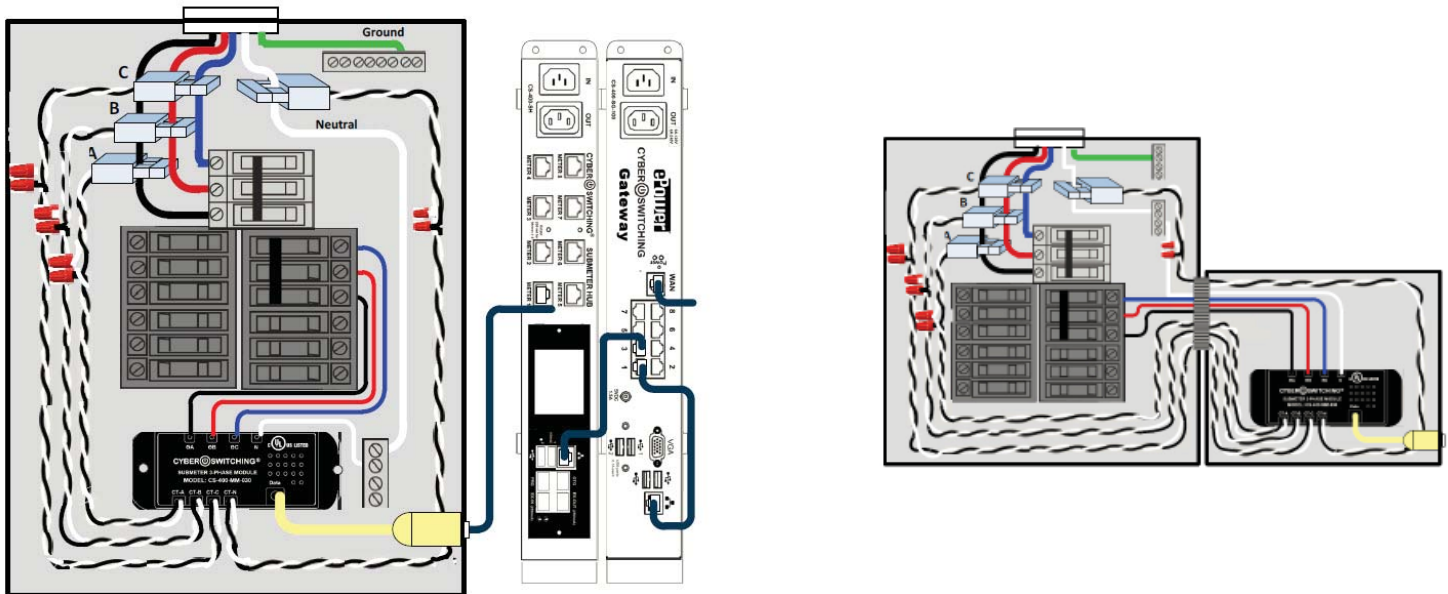
### CS-400 SUBMETERING SOLUTION

- Power quality, trigger setting to capture swells and transients
- Net metering
- Integral peak demand calculator
- Measures RMS, Active, Reactive and Apparent Power, Power Factor
- Detects and reports total harmonic distortion of all harmonics within 2.8kHz pass band on all phases

## SYSTEM COMPONENTS

PRODUCT NO.	PRODUCT DESCRIPTION
CS-400-MM-030A	Three-phase smart submeter module for advanced submetering system
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	Submeter Hub
CS-400-SG-100	ePower Gateway with Energy Management & Control (EMC)
EMC3GW0200	EMC 3.0 Gateway Edition for 200 points & 1 year support & software upgrades
EMC3GW0200-R	EMC 3.0 Gateway Edition Renewal additional 1 year
EMC3GW00TB	EMC 3.0 Gateway Edition - Tenant Billing Package
EMC3ED0500	EEMC 3.0 Enterprise Edition for 500 IP-addressable devices & 1 year support & software upgrades
EMC3ED0500-R	EMC 3.0 Enterprise Edition Renewal additional 1 year
EMC3EDA500	EMC 3.0 Enterprise Edition for additional 500 IP-addressable devices & 1 year support & software upgrades.
EMC3EDA500-R	EMC 3.0 Enterprise Edition for additional 500 IP-addressable devices Renewal additional 1 year

## 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).