

CS-400 SUBMETERING SYSTEM

A third-generation Smart Submeter solution, the CS-400 offers ease of installation and cost-effective code compliance for commercial metering, in both new and retrofit applications.

Designed for performance at an unprecedented price point, the CS-400 solution provides Title 24 compliant submetering capabilities and performance. The CS-400 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

MODULAR DESIGN

The CS-400-MM Submeter module provides measurement of kWh, kWh demand with peak date and time, and real time kW. 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.

SIMPLIFIED INSTALLATION

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.



FUTURE SCALABILITY

The CS-400 submetering system utilizes the Cyber Switching technology platform, which enables facility or property management professionals to upgrade their submetering systems in the future if desired. Capabilities include proactive management of energy usage programs, to reduce average energy costs and minimize utility demand charges on an ongoing basis.

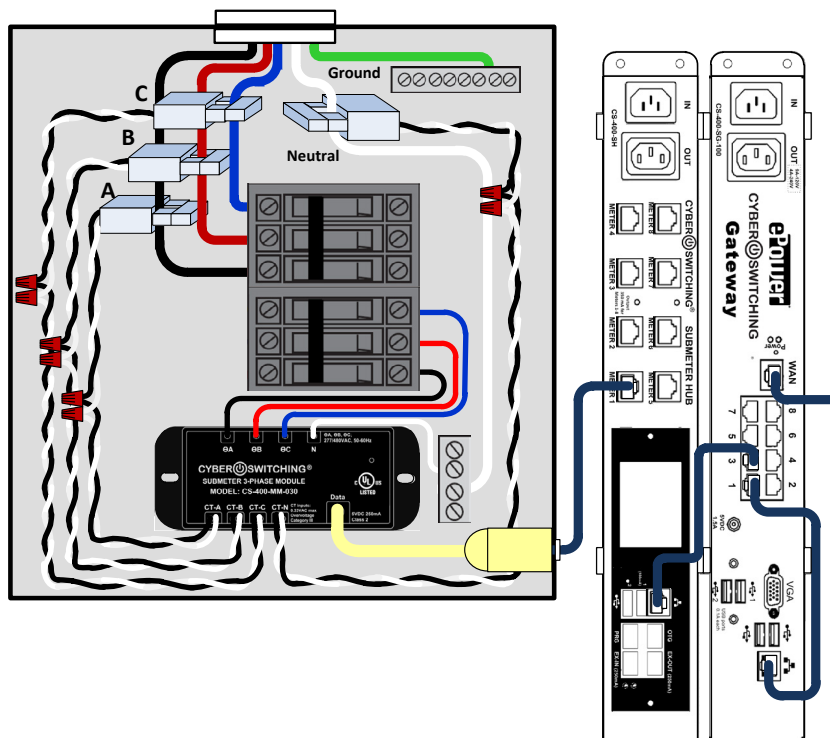
CS-400 SUBMETERING SYSTEM

- Code compliant kWh submetering
- Reports
 - Total energy in kWh, resettable
 - Amps 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
- Configurations available to monitor either 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
- Modular architecture enables future scalability

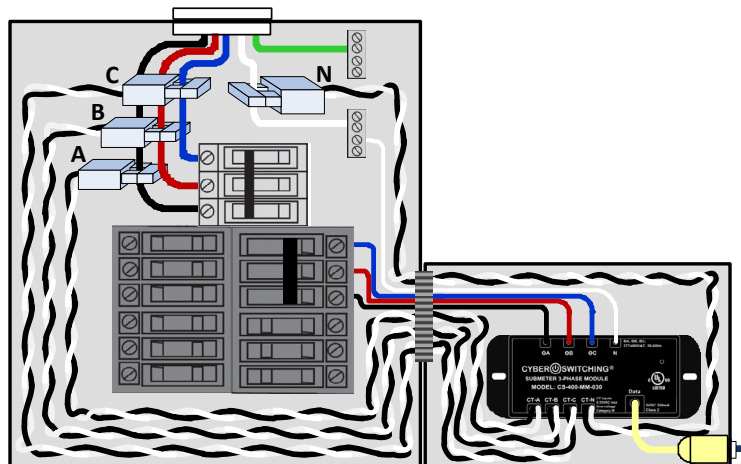
SYSTEM COMPONENTS

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


SYSTEM INSTALLATION AND ARCHITECTURE



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



ENERGY MONITORING DATA

 Meter1		
Line A	120V	80.1A
Line B	120V	80.2A
Line C	120V	80.0A
Line N		0.01A

BACK
Details

Energy data displayed on the Hub LCD screen.

Submeter

CYBER@SWITCHING®

Home	Voltage Sync	Users	Settings	System
Current User: admin				Logout
Temperature : NC Pressure : NC Humidity : NC				
Meter 1 (0.00 kWh)		Details		✔ Connected
Line	Status	Voltage	Current	Frequency
Line A	●	120.56 V	0.02 A	60.00 Hz
Line B	●	121.56 V	0.02 A	60.00 Hz
Line C	●	121.46 V	0.02 A	60.00 Hz
Line N	●	N/A	0.04 A	N/A
Meter 2 (0.00 kWh)		Details		
Line	Status	Voltage	Current	Frequency
Line A	●	0.00 V	0.00 A	0.00 Hz
Line B	●	0.00 V	0.00 A	0.00 Hz
Line C	●	0.00 V	0.00 A	0.00 Hz
Line N	●	N/A	0.00 A	N/A

Energy data displayed via Web-based interface.

Meter Details		
Total kWh Demand	10000.10 kWh	Reset
Real Time kW Load	0.00 kW	
kWh Demand (Previous 15 min period)	0.00 kWh	09-21-2015 09:27
kW Peak Demand	0.00 kW	09-21-2015 09:27
Historic kWh Peak Demand	30000.00 kWh	01-16-2007 10:09 Reset
Meter Name	Meter 1	Change

Submeter

CYBER@SWITCHING®

Home	Users	Settings	System
Current User: admin			Logout
Network Settings			
MAC Address: 08:1E:C0:CS:B9:EF			
Host Name: CYBERSWITCH			
<input checked="" type="checkbox"/> Enable DHCP			
IP Address: 10.0.3.175			
Subnet Mask: 255.255.255.0			
Gateway: 10.0.3.1			
Primary DNS: 10.0.2.10			
Secondary DNS: 10.0.2.12			
Save Network Settings			
Warning! Changing IP address cause device to lose the network connectivity with this device, after changing the network settings enter the new IP address manually to connect this device.			