

## CS-400-MM-030 THREE PHASE SMART SUBMETER MODULE

**CS-400-MM-030 Three Phase Smart Submeter Module with Title 24 compliance, ease of installation, and cost benefits.**

Designed for performance at an unprecedented price point, the CS-400-MM-030 submeter provides capabilities and performance which, until now, have only been available in significantly more costly meters. State-of-the-art three-phase Smart Meter Technology allows a single CS-400-MM-030 product to satisfy virtually every three-phase configuration as well as applications up to 480V.

The hardware design also allows for software upgradable performance, so customers can select only the performance they require while retaining the ability to scale in the future. Performance levels range from a basic system to a power quality meter with harmonic distortion, to an advanced system with real time wave form logging. The meter module platform offers a perfect solution for a contractor who must satisfy Title 24 requirements while still allowing a future owner to upgrade performance without replacing installed equipment,

### Applications

Use the CS-400-MM-030 in commercial, institutional, industrial and government applications for:

- Load profiling and benchmarking
- AMR/BAS/BMS/EMS integration
- Usage aggregation
- Tenant cost allocation
- Measurement and verification
- Energy conservation and cost reduction
- Green building initiatives and government mandates
- Provides alerts and log files from monitoring of individual device activity
- Provides user log files
- Upgradeable to demand response capability



### CS-400-MM-030

- Interfaces directly to CS-400-SH Submeter Hub
- Power quality, trigger setting to capture swells and transients
- Integral peak demand calculator
- Reports 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
- Supports:
  - Voltage per phase
  - Current per phase
  - Net metering
  - Real Time load in kW
  - Line Frequency
  - Power Factor per phase
  - Crest Factor per phase
  - kVAh
  - kVA and kVAR
  - Watts
  - VA, VAR
  - THD, and harmonic distortion of all harmonics on all phases

FEATURE	TECHNICAL SPECIFICATION
Input Voltage	120-480Vac Three Phase 50/60 Hz
CT coil	0.333V current transformer
Power consumption	1.25 watts
Accuracy	Calibrated to better than +/- 0.2% accuracy from 1% to 100% of rated load
Rating	ANSI C12.20 and IEEE1459EN50470-1 ,EN50470-3IEC 62053-21, IEC 62053-22, IEC 62053-23Supports IEC 61000-4-7 Class 1 and Class 11 accuracy specification
Basic Submetering System Reported Values	Total active energy in kWh, resettable option Reports current and voltage for phases A/B/C Real time kW Demand: kW demand based on 15 min period; kW peak based on 15 min period
Advanced Submetering System (Power Quality Software Module and ePower Gateway) Reported Values	All the reported values of the Basic Submetering System with the following additional values: Phase total active energy accumulation. Phase reactive energy accumulation. Phase apparent energy accumulation. Current / Voltage peak - The maximum absolute values reached by the current / voltage channels over a certain number of half-line cycles. Net metering. Time interval between phases - Can be used to measure the time delay between phase voltages. Crest factor. Power factor Total harmonic distortion (THD) ratios of the phase voltage / current computed using the rms values of fundamental components and the rms values of the phase voltage /current. Harmonic distortion of the phase voltage / current harmonic A/B/C relative to the fundamental.
	<b>Alarms :</b> Triggered by set point
	<b>Alerts:</b> Low/High Current per phase Unbalanced Load Voltage SAG per phase No Voltage per phase Low/High Voltage per phase Sequence error No Load per phase

## ORDERING INFORMATION

Product No.	Product Description
CS-400-MM-030B	Three-Phase Smart Submeter Module for Basic Submetering System
CS-400-MM-030A	Three-Phase Smart Submeter Module for Advanced Submetering System

NOTE: Programming cable is included with CS-400-SH Submeter Hub. Cable not sold separately.