



# EM-2000 Electric Submeter

## Din-Rail & Multiple Meter Cabinets

### Features

- The H2O Degree IEM-2000 is a universal application submeter.
- Available as stand-alone or multiple meter cabinet configuration.
- Submeter works on any 50/60 Hz system found around the world.  
Single-Phase 120V 2 wire  
Single-Phase 120/240V 3 wire  
Three-Phase 120-400V 3 wire  
Three-Phase 120-480V 4 wire
- The meter uses our full range of compact external CTs. CT ratio can be set internally to work with up to 5000 amp CTs (no multiplier needed.)
- RS-485 communication with 8x faster speed for remote reading.
- Revenue Grade Accuracy.
- Accurate to 0.5% (Class 0.5).
- UL Listed & CUL Listed. Tested to CSA Standards.
- Certified by the State of California Department of Weights and Measures. It is California Type Approved and meets California standards for revenue grade metering. Many other states accept California Type Approval for their metering requirements



### Overview

The H2O Degree EM-2000 electric meter is an advanced universal smart meter for all of your metering needs.

The Revenue Grade meter can be used on single-phase (120V 2-wire or 120/240V 3 wire) or three-phase (120-400V 3 wire or 120-480V 4 wire) applications.

The meter is equipped with fast RS-485 Communications and is compatible with 50/60 Hz applications. Meter supports 100A to 5000A CTs. This meter will work with any system commonly used around the world.

## Ordering Information

Model	Description
EM-2000 **	EM-2000 Electric Submeter with RS-485 Communication**
CT2000-SOL-200	Solid-Core 200A CT 26.6mA, 0.51" hole diameter
CT2000-SPL-200	Split-Core 200A CT 26.6mA, 0.51" hole diameter
CT2000-SOL-400	Solid-Core 400A CT 26.6mA, 0.91" hole diameter
CT2000--SPL-400	Split-Core 400A CT 26.6mA, 0.98" hole diameter
CT2000-SOL-600	Solid-Core 600A CT 26.6mA, 1.77" hole diameter
CT2000-SOL-800	Solid-Core 800A CT 26.6mA, 3.15" hole diameter
CT2000--SPL-800	Split Core 800A CT 26.6mA, 2.56" hole diameter
CT2000--SPL-1500	Split Core 1500A CT 26.6mA, 4.13" hole diameter
CT2000--SPL-3000	Split Core 3000A CT 26.6mA, 4.13" hole diameter

\* Additional CTs available, contact factory for details. \*\* Requires M54600 Radio Interface-see spec sheet for details.

3/2017

**H2O Degree**  
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### Technical Specifications

#### Technical Specifications

##### Electrical

Nominal Voltage Ranges:

- Single-Phase, 120V, 2-wire, 1 line and Neutral
  - Single-Phase, 120/208-240V, 3-wire, 2 lines and Neutral
  - Three-Phase, 120V, 3-wire, 3 lines NO Neutral
  - Three-Phase, 120/208-240V, 4-wire, 3 lines and Neutral
- Rated Frequency: 50/60 Hz

##### Environmental

Range of allowable environmental conditions: Pollution Degree 2, Measurement Category III, Altitude rating 2000 meters max. Maximum Temperature Range: -30 Degrees C to 70 Degrees C

##### Specifications

Tamper Detection Class 1  
Protected by Double Insulation  
Accuracy Class 0.5

##### Physical

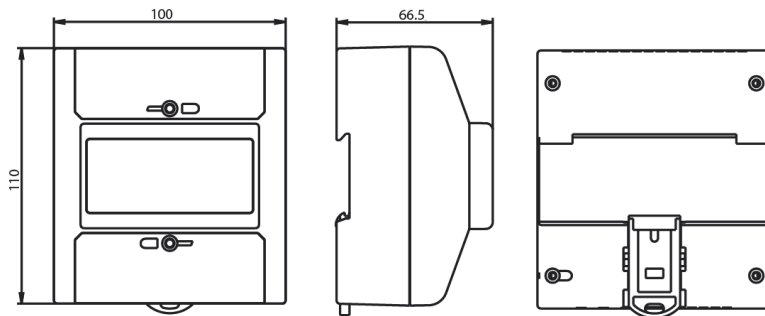
(H x W x D) 3.7 x 3.7 x 0.8 inches  
Color: Black  
Weight / shipping weight < 9 oz. / 1.8 lbs.

##### Warranty

Two Years

#### Additional Information

##### Dimensions



Load current	Power factor COS $\Phi$	Basic error%	
		Class 0.5	Class 1
0.05I <sub>b</sub>	1.0	±1.0	±1.5
0.1I <sub>b</sub> ~I <sub>max</sub>	1.0	±0.5	±1.0
0.1I <sub>b</sub>	0.5(L)	±1.0	±1.5
	0.8(C)	±1.0	±1.5
0.2I <sub>b</sub> ~I <sub>max</sub>	0.5(L)	±0.5	±1.0
	0.8(C)	±0.5	±1.0

OmniMeter I v.3 Accuracy Class: 0.5

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