EKM METERING INC.

METERING SOLUTIONS

Save Resources, Save Money, Win.

A new standard in metering systems and services. Unrivaled value and quality.

Founded in 2007, EKM Metering Inc. (www.ekmmetering.com), designs and manufactures advanced submetering hardware for electricity, water and gas systems. We also offer a plug-and-play cloud-based data system (EKM Push) and an online application (www.encompass.io) to manage meter data at any scale. EKM's innovative approach includes low cost hardware, free data and cloud storage, along with free dashboards and software, to offer unprecedented value and a complete submetering solution for virtually any application.

v.3 Omnimeters

Omnimeter I v.3

Universal revenue-grade kWh meter
0.5% accuracy
120V, 230V, 240V single phase (2 wire)
120/240V single phase (3 wire)
120–415V 3-phase 3-wire
120–480V 3-phase 4-wire
50-60Hz
Supports CTs from 100A to 5000A
RS-485 2-wire communications
Pulse Output

Omnimeter II UL v.3

Universal revenue-grade kWh meter
0.5% accuracy
UL and cUL Listed
120V, 230V, 240V single phase (2 wire)
120/240V single phase (3 wire)
120–240V 3-phase 3-wire
120–240V 3-phase 4-wire
50-60Hz
Supports CTs from 100A to 5000A
RS-485 2-wire communications
Pulse Output

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v.3 Omnimeter Dataset:

# LCD Display Data	# LCD Display Data	# LCD Display Data
01 Total kWh (fwd + rev)	06 Amps L1	11 Watts L3
02 Reverse kWh	07 Amps L2	12 Watts Total
03 Volts L1 (Line 1)	08 Amps L3	13 CosΘ L1 (Power Factor)
04 Volts L2	09 Watts L1	14 CosΘ L2
05 Volts L3	10 Watts L2	15 CosΘ L3

v.4 Omnimeters

Omnimeter Pulse v.4

Universal revenue-grade kWh meter
0.5% accuracy
120V, 230V, 240V single phase (2 wire)
120/240V single phase (3 wire)
120V–415V 3-phase 3-wire
120V–480V 3-phase 4-wire
50-60Hz
Supports CTs from 100A to 5000A
RS-485 2-wire communications
Pulse Output
x3 Pulse counting inputs

Omnimeter Pulse UL v.4

Universal revenue-grade kWh meter
0.5% accuracy
UL and cUL Listed
ANSI c12.1 and c12.20
120V, 230V, 240V single phase (2 wire)
120/240V single phase (3 wire)
120–240V 3-phase 3-wire
120–240V 3-phase 4-wire
50-60Hz
Supports CTs from 100A to 5000A
RS-485 2-wire communications
Pulse Output
x3 Pulse counting inputs

v.5 Omnimeters

Omnimeter HV v.5

Universal revenue-grade kWh meter
0.5% accuracy
120V–600V single phase (2 wire)
120V–600V single phase (3 wire)
120V–600V 3-phase 3-wire
120V–600V 3-phase 4-wire
50-60Hz
Supports CTs from 100A to 5000A
RS-485 2-wire communications
Pulse Output
x3 Pulse counting inputs
Optional battery backup power

v.4 and v.5 Omnimeter Dataset:

#	LCD Display Data	#	LCD Display Data	#	LCD Display Data
01	Total kWh	15	Cosθ L3	29	Pulse Count 1
02	Reverse kWh	16	T1 kWh (Time of Use 1)	30	Pulse Count 2
03	Volts L1 (Line 1)	17	T2 kWh	31	Pulse Count 3
04	Volts L2	18	T3 kWh	32	kWh on L1 (Line 1)
05	Volts L3	19	T4 kWh	33	Reverse kWh on L1
06	Amps L1	20	Reverse T1 kWh	34	kWh on L2
07	Amps L2	21	Reverse T2 kWh	35	Reverse kWh on L2
08	Amps L3	22	Reverse T3 kWh	36	kWh on L3
09	Watts L1	23	Reverse T4 kWh	37	Reverse kWh on L3
10	Watts L2	24	VARs L1 (Reactive)	38	Total KVARh (Reactive Total kWh)
11	Watts L3	25	VARs L2	39	Resettable kWh
12	Watts Total	26	VARs L3	40	Resettable Reverse kWh
13	Cosθ L1 (Power Factor)	27	VARs Total	41	3 Inputs High/Low
14	Cosθ L2	28	Frequency (Hz)	42	Maximum Demand

Communications & Data

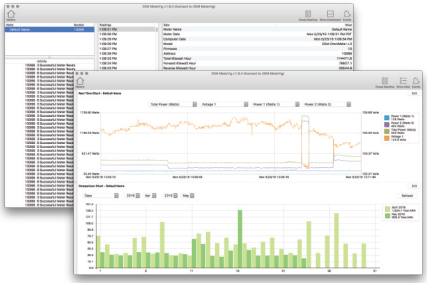
EKM Push3 Gateway

Sends Omnimeter data to the cloud
Once/minute read rate
Free long term data storage
Free data available online
Two-way communication, control
Supported by Encompass.io
Supported by EKM Dash software
Plug and play installation
Supports up to 128 meters per gateway

www.Encompass.io

Web application for EKM Push data
Dashboard display
Customizable Widgets
Meter Billing
CSV and PDF exports
Meter data sharing
Free

EKM Dash Software



For Windows, Mac, or Linux
Reads and logs meter data
EKM Push supported
CSV and email reporting
Dashboard with graphs
Alerts and triggers
Free

Current Transformers

Solid Core - 26.6mA Output

BCT-007-100UL: 7mm, 100A
EBCT-013-200UL: 13mm, 200A
BCT-015-200: 15mm, 200A
BCT-025-200: 25mm, 200A
BCT-025-400: 25mm, 400A
BCT-045-600: 45mm, 600A
BCT-080-800: 80mm, 800A

Split Core - 26.6mA Output

SCT-013-200: 13mm, 200A
PSCT-019-200: 19mm, 200A, Piercing
SCT-025-200UL: 25mm, 200A
ESCT-025-400UL: 25mm, 400A
SCT-032-400: 32mm, 400A
ESCT-055-600: 55mm, 600A
SCT-065-800: 65mm, 800A
ESCT-090x050-1500UL: 90x50mm, 1500A
ESCT-120x080-3000: 120x80mm, 3000A
SCT-180x130-5000: 180x130mm, 5000A

UL Approved Current Transformers			
Part Number	Type	Inside Diameter	Max Amperage
BCT-007-100	Solid Core	7mm	100A
EBCT-013-200UL	Solid Core	13mm	200A
BCT-015-200	Solid Core	15mm	200A
BCT-025-200	Solid Core	25mm	200A
BCT-025-400	Solid Core	25mm	400A
SCT-013-200	Split Core	13mm	200A
SCT-025-200UL	Split Core	25mm	200A
ESCT-025-400UL	Split Core	25mm	400A
SCT-032-400	Split Core	32mm	400A
ESCT-090x050-1500UL	Split Core	90x50mm	1500A

Gas Meters

3/4” Gas Meter (PGM-075)

Diaphragm Type
Steel Body
3/4” NPT Brass Fittings
Pulse Output
Cubic Feet
One pulse per cubic foot

1.5” Gas Meter (PGM-150)

Diaphragm Type
Steel Body
1.5” NPT Brass Fittings
Pulse Output
Cubic Feet
One pulse per cubic foot

Water Meters

3/4” Water Meter (SPWM-075-CF)
3/4” Hot Water Meter (HOT-SPWM-075-CF) - 165ºF (74ºC)

Stainless Steel Body (304 grade)
Stainless Steel Fittings (201 grade)
3/4” NPT Fittings
Pulse Output
Reads in Cubic Feet
One pulse per 1/10 cubic foot

3/4” Water Meter (SPWM-075-HD-NSF)
3/4” Vertical Water Meter (VSPWM-075-HD-NSF)

Stainless Steel Body and Fittings (304 grade)
3/4” NPT Fittings
High Definition Pulse Output
Reads in Cubic Feet
One pulse per 1/100 cubic foot
NSF/ANSI/CAN 61 certified

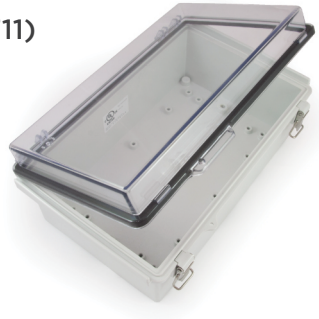
1.0” Water Meter (SPWM-100-NSF)
1.5” Water meter (SPWM-150-NSF)
2.0” Water Meter (SPWM-200-NSF)

Stainless Steel Body and Fittings (304 grade)
NPT Fittings
Pulse Output
Reads in Cubic Feet
One pulse per 1/10 cubic foot
NSF/ANSI/CAN 61 certified

Meter Enclosures

UL Listed Watertight Enclosure (EKM-172711)

Transparent hinged/gasketed cover
Stainless steel latches
UL and cUL Listed
All hardware and DIN rail included
Surface mounting
Dimensions: 6.7” x 10.63” x 4.33"
Fits 2-3 meters inside



UL Listed Watertight Enclosure (EKM-131808)

Transparent hinged/gasketed cover
Stainless steel latches
UL and cUL Listed
All hardware and DIN rail included
Surface mounting
Dimensions: 5.32” x 7.28” x 3.35"
Fits 1 meters inside

Indoor Enclosure (EKM-IENC)

All hardware and DIN rail included
Flush or surface mounting
Fits one meter inside
*Not compatible with v.5 Omnimeters

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