Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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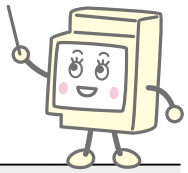
Eco-POWER METER® performance comparis

		Main unit		Expansion unit	Main unit		Expansion unit			
		KW2M-A	**KW2M-X**	**KW2M-A／KW2M-X**	**KW2G**	**KW2G-H**	**KW2G／KW2G-H**			
		Standard type	Memory type		Standard type	SD memory card type	Power measurement	Power measurement and Pulse output	Pulse input	Analog input
Appearance										
Model No.		**AKW263100A**	**AKW264100A**	**AKW272100A**	**AKW2010G**	**AKW2020G**	**AKW2110G**	**AKW2160G**	**AKW2152G**	**AKW2182G**
Dimensions (mm in) (W × H × D)		85×140×65 3.346×5.512×2.559		85×70×65 3.346×2.756×2.559	50×95×65 1.97×3.74×2.56		25×95×65 0.98×3.74×2.56			
Mounting method*1		DIN rail								
Operating power supply		100-240V AC								
Input measured voltage (Select with setting mode)		0 to 690V AC *When UL standard is supported 0 to 300V AC			100 / 200V AC system				–	–
Phase and wire system	Single-phase two-wire system	○			○	○	○	○	–	–
	Single-phase three-wire system	○			○	○	○	○	–	–
	Three-phase three-wire system	○			○	○	○	○	–	–
	Three-phase four-wire system	○			–	–	–	–	–	–
Load measurement for 400 V AC system*2		Transformer not required. Direct input possible			External voltage transformer (VT) required.				–	–
Current transformer (CT)		Commercial current sensor *3 (1A or 5A CT)			Dedicated type: 5 A, 50 A, 100 A, 250 A, 400 A and 600 A				–	–
									–	–
Measuring items	Integrated electric power	○	○	○	○ (Active)				–	–
	Instantaneous electric power	○	○	○	○ (Active, Reactive, Apparent, Regenerative)				–	–
	Current	○	○	○	○ (R, N/S, and T)				–	–
	Voltage	○	○	○	○ (RS, RT, and TS)				–	–
	Electricity charge *4	○	○	Displayed on the main unit	○	○	Displayed on the main unit	Displayed on the main unit	–	–
	Conversion carbon dioxide value	○	○		○	○			–	–
	Power factor	○	○		○	○			–	–
	Frequency	○	○		○	○			–	–
	Hour meter	○	○	○	–	–	○*5	○*5	○*5	–
	Pulse count value	○	○	–	○	○	–	–	○*6	–
	Simultaneous power and pulse measurement	○	○	–	○	○	–	–	–	–
	Demand *7	○	○	–	–	–	–	–	–	–
	Electric power quality	○*9	○*9	○*9	–	–	–	–	–	–
Communication	RS485 Communication protocol*10	MEWTOCOL, MODBUS（RTU）switchover								
	RS485 Number of connected units	Up to 99 units								
	Ethernet Communication protocol*10	MEWTOCOL,MODBUS(TCP)			–	–	–	–	–	–
	Ethernet Number of connected units	TCP / IP , UDP / IP			–	–	–	–	–	–
Number of pulse input point *11		1 point		–	1 point	1 point	–	–	2 points	–
Number of pulse output point		2 points		–	1 point	1 point	–	2 points	–	–
Number of analog input point *12		–	–	–	–	–	–	–	–	2 points
Excess alarm output	Instantaneous active electric power	○	○	–	○	○	–	○	–	–
	Current value	○	○	–	○	○	–	○	–	–
	Stand-by electric power	○	○	–	○	○	–	○	–	–
	Preset value	○	○	–	○	○	–	–	–	–
	Demand	○	○	–	–	–	–	–	–	–
Main unit memory		–	○	–	–	○	–	–	–	–
External memory		–	–	–	–	○	–	–	–	–
Calendar timer		–	○	–	–	○	–	–	–	–
Simple measurement		○	○	○	○	○	○	○	–	–
Web server		–	○	–	–	–	–	–	–	–
Tool and software	**KW Monitor**	–	–	–	○	○	○	○	○	○
	KW Watcher	○	○	○	○	○	○	○	○	○
	KW View	–	–	–	–	○	○ When connected to **AKW2020G**			
Standard		CE,cTUVus			CE,S-MARK	CE	CE,S-MARK	CE	CE,S-MARK	

*1 DIN rail, mounting frame, and terminal socket are sold separately.
*2 VT (secondary side rated value 110V) is necessary for load measurement which exceeds the rated input voltage.
*3 **KW2M**, **KW9M**: Primary side 65,535A or less, **AKW8115**: Primary side 4,000A or less. A general-purpose CT with a secondary side current 1A or 5A.
*4 The eco-power series is for self-managed energy-savings and cannot be used for billing purposes.
*5 Hour meter function can be used only with main unit and one expansion unit. Refer to the product page for detail.
*6 Displayed at the main unit

Select as required!



	KW9M		KW1M		KW1M-H	KW4M DIN□48		KW7M	KW8M DIN48×96		
	Standard type	Advanced type	Standard type		SD memory card type	MEWTOCOL type	MODBUS type	DIN rail		High performance type	1 A / 5 A CT input type
	 PANEL mounting	 PANEL mounting	  DIN Screw PANEL mounting		 DIN Screw PANEL mounting	 DIN Screw PANEL mounting		 DIN	 PANEL mounting	 PANEL mounting	 PANEL mounting
	AKW91110	AKW92112	AKW1110	AKW1111	AKW1121	AKW5111 AKW5211	AKW5112 AKW5212	AKW7111	AKW8111	AKW8111H	AKW8115
	96×96×68 3.78×3.78×2.68 (including terminal base)		75×90×50 2.95×3.54×1.97			Screw terminal type: 48×48×81.9 1.89×1.89×3.22 11-pin type: 48×48×87.5 1.89×1.89×3.44		22.5×75×100 0.89×2.95×3.94	48×96×98.5 1.89×3.78×3.88		
	Panel mounting		DIN rail, Screw, Panel mounting(mounting frame is required)			DIN rail, Screw, Panel mounting (option parts are required for each method)		DIN rail	Panel mounting		
	100-240V AC 100-300V DC		100-240V AC								
	0 to 500V AC		100/200V AC system	100/200/400V AC system		100/200V AC system			100/200/400V AC system		
	○	○	○	○	○	○		○	○	○	○
	○	○	○	○	○	○		○	○	○	○
	○	○	○	○	○	○		○	○	○	○
	○	○	–	○	○	–		–	○	○	○
	Transformer not required. Direct input possible		External voltage transformer (VT) required.	Transformer not required Direct input possible		External voltage transformer (VT) required.			Transformer not required. Direct input possible.		
	Commercial current sensor *3 (1A or 5A CT)		Dedicated type: 5 A, 50 A, 100 A, 250 A, 400 A and 600 A			Dedicated type: 5 A, 50 A, 100 A, 250 A and 400 A			Dedicated type: 5 A, 50 A, 100 A, 250 A, 400 A and 600 A		Commercial current sensor*3 (1A or 5A CT)
	○	○	○ (Active)	○ (Active)	○ (Active)	○ (Active)	○ (Active)	○ (Active)	○ (Active, Reactive, Apparent)		
	○	○	○ (Active)	○ (Active)	○ (Active)	○ (Active)	○ (Active)	○ (Active)	○ (Active, Reactive, Apparent)		
	○	○	○ (R and T)	○ (R, S, and T)	○ (R, S, and T)	○ (CT1 and CT2)	○ (CT1 and CT2)	○ (CT1 and CT2)	○ (CT1, CT2, and CT3)		
	○	○	○ (R and T)	○ (R, S, and T)	○ (RS, RT, and TS)	○ (between 1 and 2, between 2 and 3)	○ (between 1 and 2, between 2 and 3)	○ (between 1 and 2, between 2 and 3)	○ (between P1 and P0, between P2 and P0, between P3 and P0)		
	○	○	○	○	○	○	○	○	○	○	○
	–	–	○	○	○	○	○	–	–	–	–
	○	○	–	○	○	–	–	–	○	○	○
	○	○	–	○	○	–	–	–	○	○	○
	–	–	○	○	○	○	○	–	○	○	○
	–	○	–	○	○	○	○	–	○	○	○
	–	○	–	○	○	–	–	–	○	○	○
	○	○	–	–	○*8	–	–	–	–	○*8	–
	○ THD only	○*9	–	–	–	–	–	–	–	–	–
	MEWTOCOL, MODBUS(RTU), DL / T645-2007 switchover		MEWTOCOL, MODBUS (RTU) switchover			MEWTOCOL	MODBUS(RTU)	MEWTOCOL, MODBUS (RTU) switchover			
	Up to 99 units										
	–	–	–	–	–	–	–	–	–	–	–
	–	–	–	–	–	–	–	–	–	–	–
	–	2 points	–	1 point	1 point	1 point	1 point	–	1 point	1 point	1 point
	–	2 points	1 point	1 point	1 point	1 point	1 point	1 point	1 point	1 point	1 point
	–	–	–	–	–	–	–	–	–	–	–
	–	○	○	○	○	○	○	○	○	○	○
	–	○	○	○	○	–	–	–	–	○	○
	–	○	–	○	○	–	–	–	–	○	○
	–	○	–	○	○	○	○	–	○	○	○
	–	○	–	–	○	–	–	–	–	○	–
	–	○	–	–	○	–	–	–	–	○	–
	–	–	–	–	○	–	–	–	–	–	–
	–	○	–	–	○	–	–	–	–	○	–
	–	–	–	–	–	–	–	–	–	–	–
	–	–	–	–	–	–	–	–	–	–	–
	–	–	○	○	○	○	–	○	○	○	○
	○	○	○	○	○	○	–	○	○	○	○
	–	–	–	–	○	–	–	–	–	–	–
	CE,cTUVus		CE,S-MARK			CE, UL,S-MARK		CE,S-MARK			

*7 Only for the reference value. Please refer to the product manual for details.
*8 IEC demand cannot be used. 30 minutes fixed demand only.
*9 Higher harmonic wave, unbalance degree measurement, etc. Refer to the product page for details.
*10 Switchover possible using setting mode. Refer to the communication specifications regarding restrictions.
*11 Input method is contact / non-voltage contact (Open collector)
*12 Input range of the analog input unit is selected using setting mode Voltage: 0 to 5V / 1 to 5V Current: 0 to 20mA / 4 to 20mA