Slim Power Meter



Features

Measurement elements

This is a Power meter that measures electrical power and energy. (Active energy / power, Reactive power, Current, Voltage, Power factor.)

Input

AC voltage and AC current input using optional CT (Max. 4 CT connection). Supports 1-phase 2-wire / 1-phase 3-wire / 3-phase 3-wire / 3-phase 4-wire. (*CT current ratings : 5 A / 50 A / 100 A / 200 A / 400 A / 600 A AC)

RS-485 (Modbus RTU) slave

Transmits measured data to an upper-level device via RS-485.

2ch Digital input (DI) or output (DO) option

Model with 2 Digital input Model with 2 Digital out WMS-PE2DI WMS-PE2DO

for 4 units on DIN rail!

1) DI : Alarm contact from electrical panel / Pulse input from flow meters.

2) DO : Energy pulse output / Alarm contact output on threshold exceed. Slim 22.5 mm width

Easy maintenance

- 1) Space-saving, slim design
- 2) Detachable terminals
- 3) FG (Frame ground) terminal
- for safety and noise reduction.



It can be used as a remote I/O with 2points DI or DO by using RS-485.

Ordering Code

WMS-PE2 1 - 00 A 2 00

	Option ② Test report DI		n ② Test report	Description		
				2ch Digital input		
	DO			2ch Digital output		
			0	None		
			1	With Test report		

5) Communication terminal (RS-485)

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Specifications

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•	Common Specifica	ations
•	Operating temperature and humidity range	-5 to +55°C, 10–90% RH (Non-condensing, non-freezing)
	Storage temperature and humidity range	-20 to +60°C, 90% RH (Non-condensing, non-freezing)
	Warm up time	30 minutes after power-ON
	Power supply voltage	100-240 V AC (50 / 60 Hz) (For both power and input)
	Input voltage range	85% to 110% of rated input voltage
	Power consumption	1) 110 V AC power : Approx. 2.5 VA max. 2) 220 V AC power : Approx. 3.6 VA max.
	Isolation	Isolation between following terminals. 1) FG (Frame ground) terminal 2) Power and voltage input terminals 3) CT input terminals 4) Digital output / input terminals

Insulation resistance		100 $M\Omega$ or more at 500 V DC				
Dielectric strength		2000 V AC / 1 min				
Dimensions		90(H)×22.5(W)×70.5(D) mm (excluding terminal extensions)				
Weight		Approx. 100 g				
Mounting		DIN rail mount				
Case material		Self-extinguishing polycarbonate resin				
Power Measure	me	nt Specifications				
Electrical systems		Rated input voltage	Number of circuits			
Single-phase 2-wire110Single-phase 3-wire110Three-phase 3-wire110Three-phase 4-wire110) V / 220 V AC	4 circuits			
		V AC (220V AC between 1-2)	2 circuits			
		0 V / 220 V AC	2 circuits			
) V / 220 V AC	1 circuits			
<u></u>						
Input channels		Current (CT) : 4 channels, Voltage (VT) : 1 circuit				
Electrical systems		Switchable via front panel display Single-phase 2-wire / Single-phase 3-wire / Three-phase 3-wire / Three-phase 4-wire				
Input frequency		50 / 60 Hz, universal				

	Thee-phase 5-wile / Three-phase 4-wile		
Input frequency	50 / 60 Hz, universal		
Allowable overload input	1) Voltage: 120% continuous, 150% for 10 seconds 2) Current: 120% continuous, 200% for 10 seconds		
Low cut	Current: Settable between 0.0% and 9.9% of rated value		
Effect of ambient temp.	0.01% / °C		

Display Specifications

Display elements	Voltage, current, active power, reactive power, power factor, active energy (received), converted values * For WMS-PE2DI model, additional display of ON-Time conversion and pulse conversion
Numeric display	Green LED 7-segment display (Character height: 7mm, 4 digits × 2 columns)

♦RS-485 Communication

Interface	RS-485 compliant		
Baud rate	Selectable via the front panel display 4800 bps / 9600 bps / 19200 bps / 38400 bps		
Low cut	Current: Settable between 0.0% and 9.9% of rated value		
Termination Resistance	Approx. 120 Ω (Enabled by turning ON the front DIP switch)		
Number of connections	Max. 31 units		
Transmission Distance	1200 m or less (Depends on devices and transmission line)		
Communication Mode	1:N communication		
Protocol	Modbus RTU		

Digital Input Specifications

Option code DI

Option code DO

Digital input opeein	
Input signal	Pulse / Dry Contact or Transistor
Measurement items	Pulse Integration Value, ON/OFF Status, ON-Time Integration [minutes]
Input channels	2 points
Input common	Negative Common (1 common for every 2 input points)
Input sense current	Approximately 5 mA (when ON resistance is 0 Ω)
Input pull-up voltage	24 V DC ±10% (internal pull-up)
Input pulse ON-Time	10 ms or more
Input pulse OFF time	10 ms or more
Maximum pulse input frequency	50 Hz or less
Pulse count range	0 to 99,999,999
ON-Time integration range	0 to 5,999,999 min

Digital Output Specifications Output signal NPN Open Collector

Output rating 30V 50 mA DC Number of outputs 2 points Output common 1 common for 2 points Output operation Totalized pulse or alarm or communication control output Totalized pulse output specifications Elements Received active energy Pulse width 100 / 250 / 500 / 1000 ms 0.001 / 0.01 / 0.1 / 0.5 / 1 / 10 / 100 kWh Unit pulse weight By assigning outputs from multiple circuits to the same terminal, their outputs can be summed and output as pulses. Alarm output specifications Flements Active Power, Phase Current *ON when the set threshold is exceeded •Communication control output Specifications Normal Output, Inverted Output, One-shot Output, Start/Stop Output **Communication control** * 0 tart/Stop Output operates per 2 channels

		output operation	ິວເ
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https://www.w	atana	be-electric.co.jp/en/	



Rated Input, Tolerance, and Conditions

Elements		Rated input	Tolerance (Excluding VT/CT Errors)	Conditions	
Current	5 A AC / 50 A AC / 100 A A	C / 200 A AC / 400 A AC / 600 A AC	±1.0% FS	Balanced Condition: Measurable from the low-cut setting value to 120% of the rated input.	
	Single-phase, 2-wire	110 V / 220 V AC			
Voltage	Single-phase, 3-wire	110 V AC (Between 1-2: 220 V AC)	+1.0%ES	Balanced Condition:	
· ····g·	Three-phase, 3-wire	110 V / 220 V AC	11.0701 0	Measurable from 80% to 120% of the rated input.	
	Three-phase, 4-wire 110 V / 220 V AC				
Power factor	±0.00% to 100.0%		±2.0% FS	$\cos\varphi = 0.5$ to 1: When not measured, power factor is assumed to be 100%.	
	Single-phase, 2-wire	Rated primary current × Rated primary voltage			
Active	Single-phase, 3-wire	Rated primary current × Rated primary voltage x 2	±1.0% FS	cosφ = 0.5 to 1 (both leading and lagging) Rated 0 to 144% (Values below ±0.4% are considered 0)	
power	Three-phase, 3-wire	Rated primary current × Rated primary voltage x $\sqrt{3}$			
	Three-phase, 4-wire	Rated primary current × Rated primary line-to-line voltage x $\sqrt{3}$			
Active Energy	Accumulation up to: 999,999,999.999 kWh (1000 GWh)		±1.0% FS [±1.5% FS]	cosφ = 1 [cosφ = 0.5] Resumes from 0.000 kWh after overflow. *No integration if frequency is out of range.	
	Single-phase, 2-wire Rated primary current × Rated primary voltage				
Reactive	Single-phase, 3-wire	Rated primary current × Rated primary voltage x 2	+1.0% ES	$\cos\varphi = 0$ to 0.866 (both leading and lagging)	
power	Three-phase, 3-wire Rated primary current × Rated primary voltage x √ 3		±1.0% FS	(Values below ±0.4% are considered 0)	
	Three-phase, 4-wire Rated primary current × Rated primary line-to-line voltage x $\sqrt{3}$				
Reactive energy	Accumulation up to: 999,999,999.999 kVarh (1000 GVarh)		±1.0% FS [±1.5% FS]	cosφ = 0 [cosφ = 0.866] Resumes from 0.000 kVarh after overflow. *No integration if frequency is out of range.	







WMS-PE2DI (2ch Digital input model)

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Terminal		Name	ł	Description
	1	RS485	+	RS-485 connector
Input & RS-485	2		-	communication line
communication	3		1	DI1 terminal
terminal	4	INPUT	2	DI2 terminal
	5		COM	Common
CT connector	-	CT1 ~ CT4		Special CT connecting cable
	6	FG		Frame ground terminal
Power supply &	7	VOLTAGE	P1	Power supply &
Volget input	8		P0	Voltage input terminal
terminal	9		P2	(Power and voltage shared)
	10		P3	100 to 240V AC

WMS-PE2DO (2ch Digital output)

Terminal		Name	l.	Description
	1	RS485	+	RS-485 connector
Output & RS-485	2		-	communication line
communication	3		1	DO1 terminal
terminal	4	OUTPUT	2	DO2 terminal
	5		COM	Common
CT connector	-	CT1 ~ CT4		Special CT connecting cable
	6	FG		Frame ground terminal
Bower oupply 8	7	VOLTAGE	P1	Power supply &
Input terminal	8		P0	Voltage input terminal
input terminal	9		P2	(Power and voltage shared)
	10		P3	100 to 240V AC

WMS-PE2DI



Electrical	Terminals				
Systems	P3	P2	PO	P1	
1P2W			Ν	1	
1P3W		2	Ν	1	
3P3W		Т	S	R	
3P4W	Т	S	Ν	R	

WMS-PE2DO



Electrical	Terminals				
Systems	P3	P2	PO	P1	
1P2W			Ν	1	
1P3W		2	Ν	1	
3P3W		Т	S	R	
3P4W	Т	S	N	R	

Name of each parts



7SEG LED (4 digits x 2 rows)

Power supply voltage Input terminal (Detachable)

- Swiches

Unit LED

Termination	resistor	switch

_ Digital input LED Digital output LED

 IO•RS-485
 Communication terminal (Detachable)

Unit LED	Display status	Meaning
PWR	ON	Indicates that the Power is on and the unit is in an energized state.
ERR	ON	Indicates that a fault or abnormal condition has occurred.
NET	Blink	Indicates that Modbus communication is in progress.
	ON	Indicates that the voltage value is currently being displayed.
V	Blink	Indicates that the voltage value is out of the measurement range.
	ON	Indicates that the current value is currently being displayed.
A	Blink	Indicates that the current value is out of the measurement range.
	ON	Indicates that the active power is currently being displayed.
KVV	Blink	Indicates that the active power is out of the measurement range.
kWh	ON	Indicates that the active energy is currently being displayed.
PF	ON	Indicates that the power factor is currently being displayed.
[k\/or]	ON	Indicates that the reactive power is currently being displayed.
(Kvar)	Blink	Indicates that the reactive power is out of the measurement range.
×10 ³	ON	Indicates that the displayed value has been multiplied by 1000. For example, when both this LED and the "V" LED are lit, the unit is 1 kV.
DI/DO LED	Display status	Meaning

DI/DO LED	Display status	Meaning
1	ON	Indicates that DI (Digital Input) 1ch or DO (Digital Output) 1ch is ON.
2	ON	Indicates that DI (Digital Input) 2ch or DO (Digital Output) 2ch is ON.



Wiring example for Power measurement





Measurement of the main breaker and one load
 Remaining loads estimated by difference

Three-phase 4-wire wiring example



Wiring example for single-phase 2-wire banched from single-phase 3-wire



Single-phase 2-wire wiring example



Single-phase 3-wire + Single-phase 2-wire wiring example

Power supply side



Measures main breaker and two single-phase 2-wire feeders
Main and selected loads can be monitored with one unit

List of measurement items (display values)

*For other measurement items, refer to the user manual."

	Measurement item details		Measurement parameters							
No.	Name	Description	Display	Upper display		Name	Lower display	Unit		
				A.1 WH A.2 A.3 A.3		Circuit A : 1	Most Significant Digit (4 digits)			
A-1~D-1	Active Energy	Display Active Energy	кwн			A.2 Circuit A : 2 Middle Di		[kWh]		
	(Receiving)	(Receiving)				Circuit A : 3	Least Significant Digit (4 digits)	-		
				A.1		Circuit A : 1	Most Significant Digit (3 digits)	[k]//]		
A-2~D-2	Active Power	Display Active Power	KW	A.2		Circuit A : 2	Least Significant Digit (4 digits)	[KVV]		
	Reactive	Display Reactive		A.1		Circuit A : 1	Most Significant Digit (3 digits)	<i>r.</i>		
A-3~D-3	Power	Power	KVAR	A	A.2 Circuit A : 2 Least Significant		Least Significant Digit (4 digits)	[kvar]		
				1 P2W	None	Circuit A : 1 Phase Current	1 Phase Current Measurement			
					A.1	Circuit A : 1 Phase Current	1 Phase Current Measurement	-		
				1 P3W	A.2	Circuit A : 2 Phase Current	2 Phase Current Measurement	-		
					A.N	Circuit A : N Phase Current	N Phase Current Measurement	-		
					A.R	Circuit A : R Phase Current	R Phase Current Measurement	-		
A-4~D-4	Current	Display Current	А	3 P3W	A.T	Circuit A : T Phase Current	T Phase Current Measurement	[A]		
			~		AS	Circuit A · S Phase Current	S Phase Current Measurement			
							P Phase Current Measurement	-		
					A.N			-		
				3P4W	A.I	Circuit A : I Phase Current	I Phase Current Measurement	-		
				A.S	Circuit A : S Phase Current	S Phase Current Measurement				
					A.N	Circuit A : N Phase Current	N Phase Current Measurement			
			1 P2W	None	Circuit A : 1 Phase Voltage	1 Phase Voltage Measurement				
			1P3W 3P3W		A.1-N	Circuit A : 1-N Phase Voltage	1-N Phase Voltage Measurement			
				1P3W	A.2-N	Circuit A : 2-N Phase Voltage	2-N Phase Voltage Measurement			
					A.1-2	Circuit A : 1-2 Phase Voltage	1-2 Phase Voltage Measurement			
					A.R-S	Circuit A : R-S Phase Voltage	R-S Phase Voltage Measurement			
				3 P3W	A.S-T	Circuit A : S-T Phase Voltage	S-T Phase Voltage Measurement	-		
A-5~D-5	Voltage	Display Voltage	V	/	A.T-R	Circuit A : T-R Phase Voltage	T-R Phase Voltage Measurement	[\]		
				3P4W	A.R-N	Circuit A : R-N Phase Voltage	R-N Phase Voltage Measurement	-		
					A.S-N	Circuit A : S-N Phase Voltage	S-N Phase Voltage Measurement	-		
					A.T-N	Circuit A : T-N Phase Voltage	T-N Phase Voltage Measurement	-		
					A.R-S	Circuit A : R-S Phase Voltage	R-S Phase Voltage Measurement			
					A S-T	Circuit A · S-T Phase Voltage	S-T Phase Voltage Measurement	-		
			A T-R	Circuit A · T-R Phase Voltage	T-R Phase Voltage Measurement					
					7.1-1					
A-6~D-6	Power factor	Display Power factor	PF	A.COS		Circuit A : Power factor	Power Factor Measurement	【%】		
				A	1	Circuit A : 1	Most Significant Digit (4 digits)			
A-7~D-7	Conversion	Display Conversion	RATE	A	2	Circuit A : 2	Middle Digit (4 digits)	-		
valu	value	value		A.3		Circuit A : 3	Least Significant Digit (4 digits)	-		
	DI1 ON Time	Diaplay DI1 ON Time				DI1 1		DI1 Accumulated ON-Time · 1	Most Significant Digit (3 digits)	
DI-1	integration	integration	ONH1	DI1.1 DI1.2		DI1 Accumulated ON-Time : 2	Least Significant Digit (4 digits)	[min]		
				DI1.2			Most Significant Digit (4 digits)			
DI-2	integration	integration	PCN1	וס	1.1		Least Significant Digit (4 digits)	[cnt]		
				DI1.2						
DI-3	DI2 ON-Time	Display DI2 ON-Time	ONH2		2.1			[min]		
	integration			DI	2.2	DI2 Accumulated ON-Time : 2	Least Significant Digit (4 digits)			
DI-4	DI2 Pulse	Display DI2 Pulse	PCN2	DI	2.1	DI2 Pulse Totalization : 1	Most Significant Digit (4 digits)	[cnt]		
	integration	Integration		DI2.2		DI2 Pulse Totalization : 2	Least Significant Digit (4 digits)			

List of setting item list

No.		Unit	Initial Value			
	1 Unit (Circuit) Common Settings: U_AL					
1-1	Electrical systems	1-phase 2-wire / 1-phase 3-wire / 3-phase 3-wire / 3-phase 4-wire /		_	3-phase 3-wire	
		1P2W branched from 1P3W / 1-phase 3-wire + 1-phase 2-wire				
1-2	Rated Voltage Input	110V / 220V			220V	
1-3	External VI Rating	Setting Range (Nume		V	2200	
04 54	2~5	Onit (Circuit) Indivi	Idual Settings: U-A to U-D		055	
2-1~5-1	Circuit Enable/Disable Setting		00 A / 400 A / 000 A	-	OFF	
2-2~5-2	Rated Current Input	SA/ 50 A/ 100 A/ 200 A/ 400 A/ 600 A		A	600 A	
$2-3 \sim 5-3$	Digital Output Terminal Assignment	Setting Range (Numeric Input): 5–9999 A		A	600 A	
2-4 5-4	Current Low-cut	Setting Range (Nume	eric Input): 0.0–9.9%	%	0.1%	
2-6~5-6	Measurement Voltage Setting	Between 1-N / 2-N / 1	1-2	-	Between 1-N	
2-7~5-7	Voltage-less Measurement ON/OFF	OFF / ON	· -	-	OFF	
2-8~5-8	Virtual Power Factor	Setting Range (Nume	eric Input): 0.0–100.0%	%	100.0%	
2-9~5-9	Conversion Coefficient	Setting Range (Nume	eric Input): 0.000–9.999	-	0.555	
2-10~5-10	Energy Preset	Setting Range (Nume	eric Input): 0.000–999,999,999.999 kWh	kWh	0.000 kWh	
2-11~5-11	Total Energy Reset (Individual Circuit)	Execute Reset of Tot	al Energy	-	-	
2-12~5-12	Quick Wiring Error Diagnosis	Display Diagnostic R	esult	-	-	
		6 Modbus Commun	ication settings RTU			
6-1	Address	Setting Range (Nume	eric Input): 0–99	-	0	
6-2	Baud rate	4800 / 9600 / 19200 /	/ 38400	bps	19200 bps	
6-3	Stop Bit	1/2		-	1	
6-4	Parity	NONE / ODD / EVEN	1	-	EVEN	
6-5	Transmission delay time	Setting Range (Nume	eric Input): 0–99ms	ms	0 ms	
	7 Digital / I	Pulse Output Setting:	POUT (For WMS-PE2DO Only)			
7-1,7-14	DO1/DO2 Output Operation Selection	OFF / Pulse Totalizat	tion Output / Alarm Operation	-	OFF	
7-2,7-15	DO1/DO2 Unit Pulse Weight Setting	0.001 kWh / 0.01 kW	′h / 0.1 kWh / 0.5 kWh / 1 kWh / 10 kWh / 100 kWh	kW	0.1 kWh	
7-3,7-16	DO1/DO2 Pulse Output Width Setting	100 ms / 250 ms / 50	0 ms / 1000 ms	ms	1000 ms	
		1-phase 2-wire	Circuit A / Circuit B / Circuit C / Circuit D			
		1-phase 3-wire,	Circuit A / Circuit C			
		3-phase 3-wire				
7-4 7-17	DO1/DO2 Alarm Circuit Assignment	3-phase 4-wire	Circuit A	_	Circuit A	
1-4,1-11	DO 1/DOZ / Ilann Onour / ISSignment	Single-phase 2-wire,	Circuit A / Circuit B / Circuit C / Circuit D		Girodit / Y	
		two-branch				
		Single-phase 3-wire	Circuit A / Circuit C / Circuit D			
7 5 7 40		+ Single-phase 2-wire		<u> </u>		
7-5,7-18	D01/D02 Alarm HI/LO Setting	HI/LO	WW / Ourset Dhans 4	-	HI	
		1-phase 2-wire	kW / Current Phase 1			
		1-phase 3-wire	Current Phase 3			
		3-phase 3-wire	kW / Current Phase 1 / Current Phase 2 / Current Phase 3			
			kW / Current Phase 1 / Current Phase 2 /			
7-6,7-19	DO1/DO2 Alarm kW/A Setting	3-phase 4-wire	Current Phase 3 / Current Phase 4	kW,A	KW	
		Single-phase 2-wire,	kW / Current Phase 1			
		two-branch				
		Single-phase 3-wire	kW / Circuit A Current phase 1 / 2 / 3 /			
		+ Single-phase 2-wire	Circuit C Current phase 1 / Circuit D Current phase 1			
7-7,7-20	DO1/DO2 Alarm HI Threshold (Active Power)	Setting Range (Nume	eric Input): ±9,999,999 kW	kW	9999.999 kW	
7-8,7-21	DO1/DO2 Alarm HI Threshold (Phase Current)	Setting Range (Nume	eric Input): 0000–9999 A	A	999.9 A	
7-9,7-22	DO1/DO2 Alarm LO Threshold (Active Power)	Setting Range (Nume	eric input): ±9,999,999 kW	KVV	-9999.999 KW	
7-10,7-23	DO1/DO2 Alarm LO Inreshold (Phase Current)	Setting Range (Nume	eric Input): 0000–9999 A	A	0.0 A	
7-11,7-24	DO1/DO2 Hysteresis Width (Active Power)	Setting Range (Nume	eric input): 0–9,999,999 KW	KVV	0.000 kvv	
7-12,7-25	DO1/DO2 Hysteresis Width (Phase Current)	Setting Range (Nume		A	0.0 A	
7-13,7-20	DO1/DO2 Output OFF Delay		eric input): 0.0–99.9 s	s	0.0 s	
1-21,1-20	DO 1/DO2 Simulated Output	UFF / UN		-	OFF	
7177	7 Digita	Soffing Bongo (Num	: PIN (FOR WWS-PE2DI ONLY)	ont	0 opt	
7-1,-7-7	DI1/DI2 Pulse Totalization Preset	Setting Range (Nume	aric Input): 0 5 000 000 minutos	min	0 crit	
7370	DI1/DI2 ON-TIME Totalization Preset	Setting Range (Nume	zation Posot	11111	0 11111	
7_/ 7.10	DI1/DI2 ONLTime Totalization Poset	Execute ONLtime Tet	talization Reset	-	-	
7-5 7-11	DI1/DI2 Pulse Totalization Coefficient	Execute UN-Time otalization Reset		-	- 1 000	
7_6 7_12	DI1/DI2 Pulse Totalization May Value	Setting range (Numeric input): 0.001 to 100.000		- cnt	99 900 000 ont	
7-13 7-14	DI1/DI2 Simulated Input	Setting range (Numeric Input): 1 to 99,999,999 cnt		-	OFF	
1-10,1-14		8 Other Se	ttings (ETC)			
<u>8_1</u>	Auto Display OFF	OFE / 1.0 min / 5.0 m	nin / 10 0 min	min	OFF	
8-2	Initialize Settings	UFF / 1.0 min / 5.0 min / 10.0 min		-	-	
8-3	Communication Reception Test	Execute communicat	ion receive test	-	-	
8-4	Communication Transmission Test	Execute communication receive test		-	-	
8-5	Reset Total Energy (All)	Reset Total energy for	or all circuits	-	-	
8-6	Setting Protection	OFF / ON		-	OFF	
8-7	Brightness Adjustment	Bright / Standard / Da	ark	-	Standard	
		Digit? Galidaid / Dait			·	



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WMS-PE2 Series



Display switching of measurement circuits

In measurement mode, each short press of the "MODE/ \triangleright " switch cycles the display through Circuit A \rightarrow Circuit B \rightarrow Circuit C \rightarrow Circuit D.





Application Examples







С

38.4

56.9

74.5

в

30.5

35.5

35.5

D

14.5

24.0

35.5

Е

55.2

76.2

92.95

(Unit : mm)

Optional Accessories (Sold Separately)

Product	Model code	Specifications
	CTL-10-CLS9-00	5A/50 A Universal Split CT
	WCTF-100 A-K	100 A Split CT (with Connector Lead Wires)
Special CT	WCTF-200 A-K	200 A Split CT (with Connector Lead Wires)
	WCTF-400 A-K	400 A Split CT (with Connector Lead Wires)
	WCTF-600 A-K	600 A Split CT (with Connector Lead Wires)
CT Connection Cable (2m)	tion Cable (2m) CTL-BUN-2P Cable to Connect Two CTs into One (Required for CT1/CT2, CT3/CT4 combina	
CT Extension Cable (3m) CTL-EN-03 Ca		Can be Extended by Connecting Up to 3 Cables (Max. 11m when Combined with CT Connection Cables)

Compact split-core CT

Model code : CTL-10-CLS9-00 Rated current : 5A/50A

Dimensions



CT connection cable

Model code : CTL-BUN-2P Cable length : 2m

Dimensions



watanabe

Split-core CT

Model code : WCTF-**BBB**A-K

Rated current : 100A/200A/400A/600A

Dimensions



CT extension cable

Model code : CTL-EN-03

Cable length : 3m

5.0

Dimensions



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