

Polaris 3000

3-Phase Multi-Function kWh Meter



With Modbus/RTU over RS485 communication!

Smart for Greenlife!

Advantages

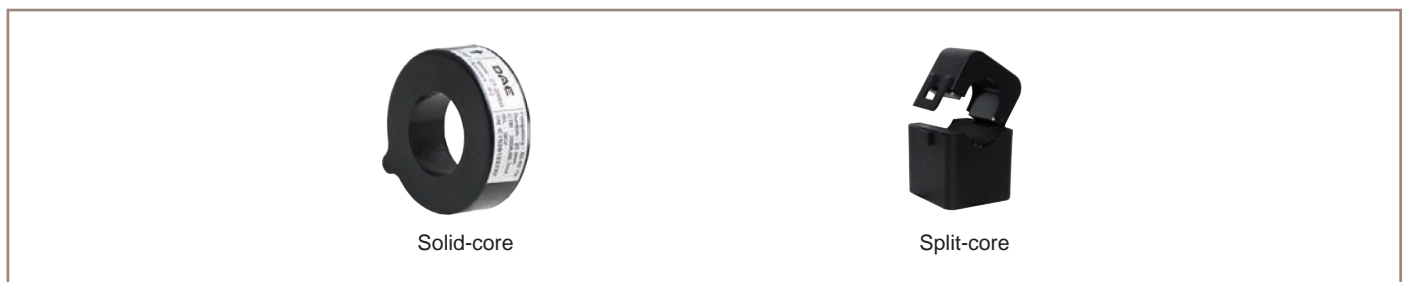
- Foolproof system. DAE meter will be warning if the CTs are installed in the wrong phases
- CTs are not direction sensitive. It does not matter if the contractors install the CT with wrong direction of current. DAE meters can detect it and compensate it
- DAE's CT is exactly the same and exchangeable among all the meters including Polaris 1000, 1500, 2000, 2500, 3000 kWh meters and SMB350 multi-circuit, multi-function meters
- 5A CT is available to measure the current of original CT in electrical panel.
- This will significantly reduce cost for customers
- With Modbus/RTU over RS485 communication
- Can interface with DAE EnergyLink400 for remote reading system with billing
- High resolution, Kt = 1Wh (1000 pulses per kWh)
- Very compact current sensors (CTs) and the accuracy will not be affected when the CTs are mounted up to 2000 feet away from the meter
- Very easy installation (not necessary to drill a hole and open the whole cover of the meter)
- Parameters reading with LED display, very clear even in not-well lighted area

Features

- Multi-function with display of kWh, kW, voltage, current, kVAh, PF, demand
- Revenue-grade accuracy
- Non-volatile Memory, the stored data is maintained through power outages
- Parallel up to three sets of CTs for cumulative reading
- Meter can be used in the following configurations:
 - 3-Phase, 3-Wire
 - 3-Phase, 4-Wire
- Demand standard (15 minute interval standard, 30 minute or 60 minute intervals available)
- UL/CUL Listed
- California CTEP approved for use with solid-core CTs
- Certified by independent test lab to exceed ANSI C12.1 national accuracy standards

Parameter	Display	Communication
Current	○	○
Voltage	○	○
kW (real power)	○	○
kWh (real energy)	○	○
kVAh (reactive energy)		○
kVA (apparent power)		○
Power Factor	○	○
Demand	○	○

Current Sensors (CTs)



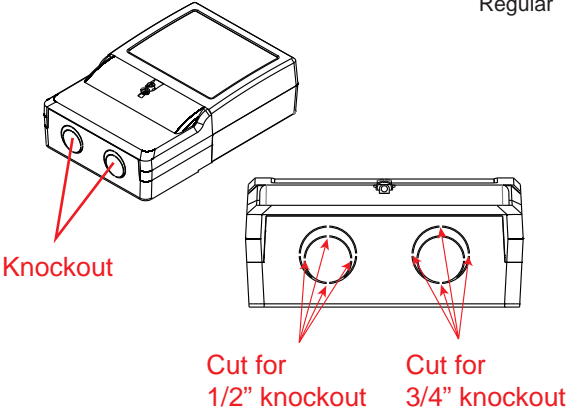

Solid-core



Split-core


Note: Please see CT's datasheet

Terminal Cover

Regular	Special
 <p>The voltage and CT wires will come from the knockout of the meter bottom.</p>	 <p>The voltage and CT wires will come from the back of the meter.</p>

Note: Please specify if special terminal cover is needed when ordering

Specifications

Technical and Physical	
Frequency	50 or 60 Hz
Working Voltage	Derived from voltage input
Power Consumption	7VA
Measured Parameters	V, A, kW, kWh, kVA, kVAh, kVA, PF, demand
Operating Temperature	-20~50°C (-4~122°F)
Relative Humidity	0~95% non-condensing
Accuracy ¹	0.5% from 1% to 100% of rated load
Safety	
Weight	690g
Dimensions	W 5" x H 7.42" x D 2.24" wall-mount (regular terminal cover) W 5" x H 6.50" x D 2.24" wall-mount (special terminal cover)
Communications	
Interface	RS485
Protocol	Modbus/RTU
Address	1 to 254 (default is last 2 digits of serial number, 01~99=1~99, 00=100)
Baud Rate	1200, 2400, 4800, 9600 (default 9600)
Data Format	8/n/1

¹ Based on DAE solid-core CT @ PF=1

Ordering Code

Configurations	KIT Ordering Code	Amp	KIT Includes	Polaris Model NO.	CT Model NO.
480V 3- Phase, 3W	P302-005 KIT	5A	1 meter + 2 split-core CTs	P302-005D	CT-5S
	P302-200 KIT	200A		P302-200D	CT-200S or CT-200SB
	P302-400 KIT	400A		P302-400D	CT-400S
	P302-600 KIT	600A		P302-600D	CT-600S
	P302-005-S KIT	5A	1 meter + 2 solid-core CTs	P302-005D	CT-5D3
	P302-200-S KIT	200A		P302-200D	CT-200D3
208-240V 3- Phase, 3W	P303-005 KIT	5A	1 meter + 2 split-core CTs	P303-005D	CT-5S
	P303-200 KIT	200A		P303-200D	CT-200S or CT-200SB
	P303-400 KIT	400A		P303-400D	CT-400S
	P303-600 KIT	600A		P303-600D	CT-600S
	P303-005-S KIT	5A	1 meter + 2 solid-core CTs	P303-005D	CT-5D3
	P303-200-S KIT	200A		P303-200D	CT-200D3
120/208V 3- Phase, 4W	P304-005 KIT	5A	1 meter + 3 split-core CTs	P304-005D	CT-5S
	P304-200 KIT	200A		P304-200D	CT-200S or CT-200SB
	P304-400 KIT	400A		P304-400D	CT-400S
	P304-600 KIT	600A		P304-600D	CT-600S
	P304-005-S KIT	5A	1 meter + 3 solid-core CTs	P304-005D	CT-5D3
	P304-200-S KIT	200A		P304-200D	CT-200D3
240/416V 3- Phase, 4W	P305-005 KIT	5A	1 meter + 3 split-core CTs	P305-005D	CT-5S
	P305-200 KIT	200A		P305-200D	CT-200S or CT-200SB
	P305-400 KIT	400A		P305-400D	CT-400S
	P305-600 KIT	600A		P305-600D	CT-600S
	P305-005-S KIT	5A	1 meter + 3 solid-core CTs	P305-005D	CT-5D3
	P305-200-S KIT	200A		P305-200D	CT-200D3
277/480V 3- Phase, 4W	P306-005 KIT	5A	1 meter + 3 split-core CTs	P306-005D	CT-5S
	P306-200 KIT	200A		P306-200D	CT-200S or CT-200SB
	P306-400 KIT	400A		P306-400D	CT-400S
	P306-600 KIT	600A		P306-600D	CT-600S
	P306-005-S KIT	5A	1 meter + 3 solid-core CTs	P306-005D	CT-5D3
	P306-200-S KIT	200A		P306-200D	CT-200D3