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Siemens recognizes that high performance facilities make for high performance business. Energy is the lifeline of your business, and better efficiency and sustainability can have a large positive impact on your bottom line.

Energy Management and Control Systems from Siemens are complete enterprise solutions that help you manage the energy costs and availability of your business. With our advanced meters and controls, you can be sure to use only the energy you need, when you need it.

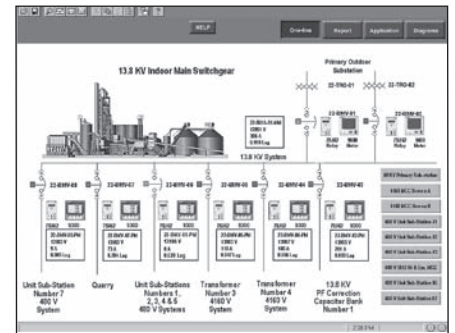
Siemens Power Distribution Solutions contribute toward achieving LEED® certification and provides the needed energy metering data for federal/local government energy reductions programs.

### Features and Benefits of Siemens Power Distribution Solutions:

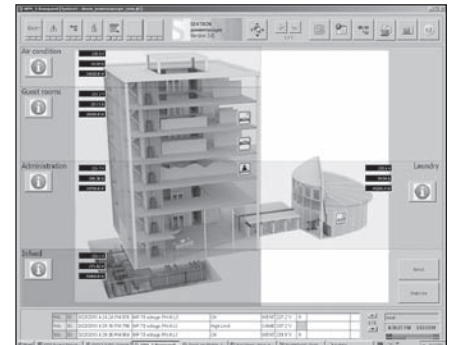
- Power Quality Reliability & Analysis
- Utilities Cost Allocation & Billing
- Utilities Usage Aggregation
- Load Preservation
- Equipment Monitoring
- Facility Monitoring & Automation
- Sequence of Event Recording
- Preventative Maintenance
- Electrical Asset Management

#### Additional Products/Services Available:

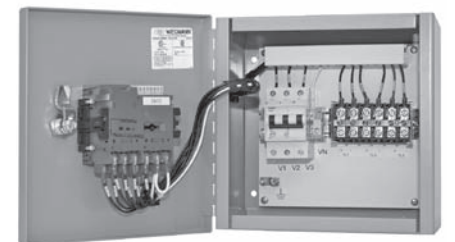
- Branch Circuit Monitoring
- Sub-Billing and Cost Allocation
- Application Engineering
- Services Agreements
- Network/Communication Components
- Integration with Existing
- SCADA/BAS Systems
- Incorporation of Third Party Devices



WinPM.net Software



Powermanager Software



Assembled Meter Enclosure



Power Meters

For Technical Assistance Contact:  
**1-800-333-7421**

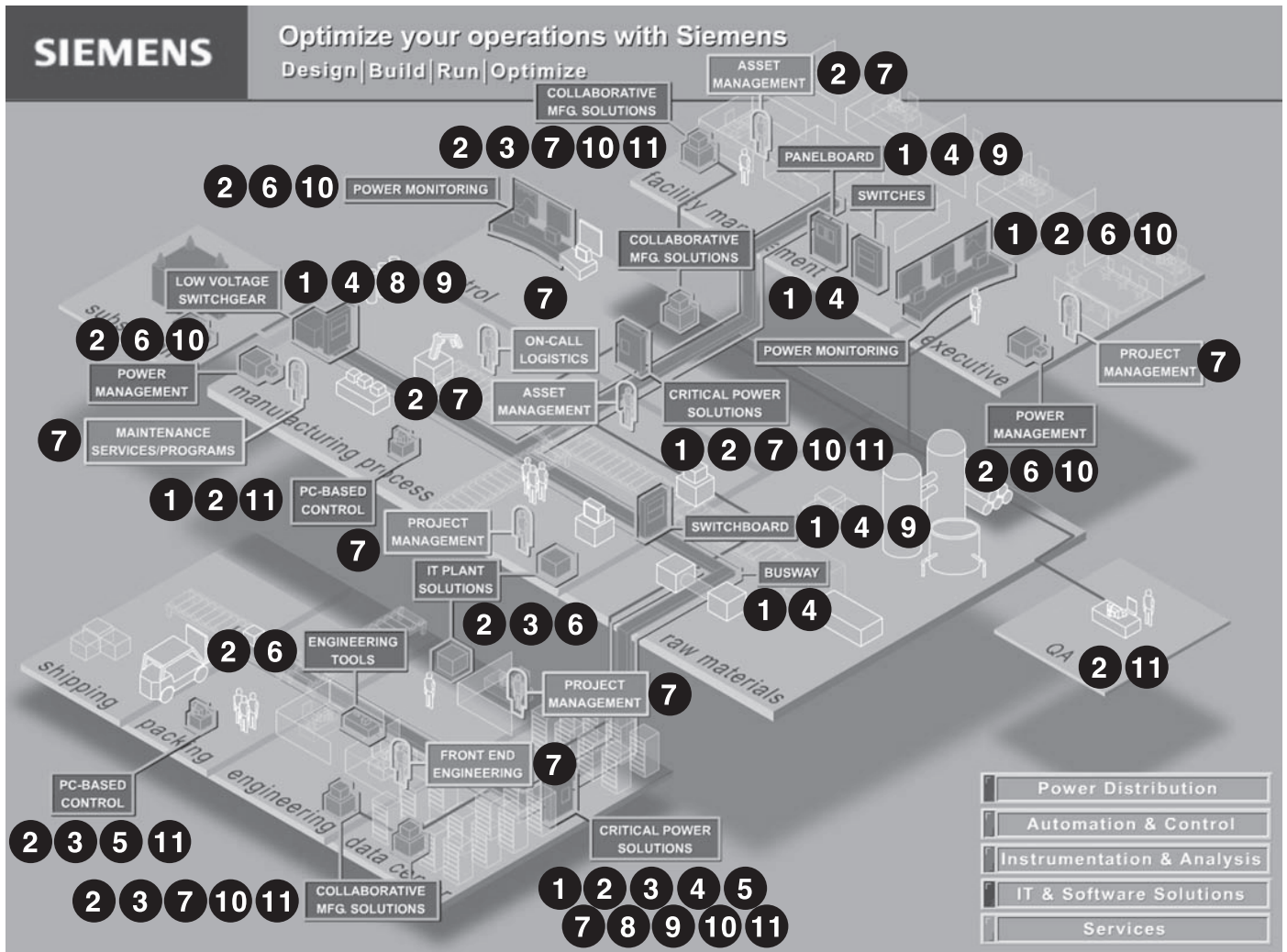
Online Support:  
**www.siemens.com/automation/support-request**

For The Latest Information Go To:  
**www.usa.siemens.com/pds**

# Totally Integrated Power

## System Overview

General



### 1. Power Meters

Siemens power monitors combine the best of new technologies and proven practices. Monitor critical loads, power quality, and demand via the web directly from the meters.

### 2. Power Monitoring Software

WinPM.Net and Powermanager web-enabled software facilitates easy, enterprise-wide connection to power monitoring equipment, circuit breakers, and other devices from Siemens and third parties. Access information via the web with unlimited no-cost clients using built-in WebReach™ via your web browser.

### 3. Communications Networks

Utilize existing Ethernet or RS-485 communications networks to extract the information you need and get it where it needs to go.

### 4. Components

Current Transformers (CTs), Voltage/Potential Transformers (PTs), Power Supplies, Ethernet Switches, Protocol Converters. Siemens can provide everything required for your system.

### 5. Intelligent I/O

Our S7 I/O enables plug-n-play communications with Modbus devices and expands digital and analog input and output functionality of Siemens Systems.

### 6. Billing and Load Allocation Software

Powermanager is the simplified solution for cost allocation, billing & load/demand analysis using your web browser.

### 7. Engineering Services

PDS Application Engineers can help from design through commissioning of even the most demanding power quality and monitoring systems.

### 8. Motor Control Centers

Monitor mains and feeders for critical or power-intensive loads. Communicate with WL and VL breakers, SIMOCODE, I/O and devices from other manufacturers. Use Siemens power meters to web-enable new as well as existing MCCs.

### 9. Low & Medium Voltage Switchgear

Web-enable switchgear by having Siemens power monitoring as well as breaker status and upload the information to a corporate Intranet or to the Internet. Use MeterMail™ directly from meters for alarm conditions or simple reporting.

### 10. Facility Management Systems

Tie into building automation systems to provide the required power and energy information. Many communications options are available ranging from legacy protocols to XML directly from the power monitors.

### 11. Distributed Control Systems, Automation, and SCADA/Human Machine Interface

Siemens power monitors and/or software can talk to all major vendors' systems.

# Power Distribution Solutions

## Intelligent Metering and Control Devices



	PAC3100	PAC3200	PAC4200	9340	9360	9510 ADR	9510	9610/9610H
<b>Power, energy and demand</b>								
Voltage/current: per phase, average	■	■	■	■	■	■	■	■
Voltage/current: unbalance	■	■	■	■	■	■	■	■
Power: real (kW), reactive (kVAR), apparent (kVA), power factor, frequency (Hz)	■	■	■	■	■	■	■	■
Energy (kWh): bi-directional, import, export	■	■	■	■	■	■	■	■
Energy (kWh): total, net	■	■	■	■	■	■	■	■
Demand: block, sliding window	■	■	■	■	■	■	■	■
Demand: thermal predicted				■	■		■	■
<b>Power quality analysis</b>								
Sag/swell monitoring					■		■	■
Symmetrical components: zero, negative, positive								■
Transient detection, microseconds								17 μs @ 60 Hz, 20 μs @ 50 Hz
Harmonics (individual, even, odd, total) up to		THD only	31st	31st	63rd		63rd	127th/256th
Sampling rate, maximum samples/cycle	64	64	170	128	128		256	512/1024
Flicker, harmonics to EN50160, IEC 6100-4-7 / 4-15				■	■			■
Configurable for IEEE 519-1992, IEEE 1159, SEMI/ITIC								■
"Number of nines" uptime data (3 nines=99.9%)		■	■				■	■
<b>Data and waveform logs</b>								
Triggered by setpoint, schedule, or external signal					■	■	■	■
Sequence-of-event logs, variable log depth			■	■	■	■	■	■
Minimum/maximum logs			■	■	■	■	■	■
Historical logs / maximum # of channels			1	1	3	800	800	800
Waveform recording					■	■	■	■
Time-stamps, resolution in seconds			0.1		0.1	0.001	0.001	0.001
Event Log			■	■	■	■	■	■
GPS time synchronization				■	■	■	■	■
<b>Communication ports &amp; I/O ( ) = Optional</b>								
RS-232/485 ports						1	1	1
RS-485-only ports	1	(1)	(1)	1	1	2	2	2
Ethernet ports		1	1	(1)	(1)	(1)	(1)	(1)
Infrared optical ports						1	1	1
PROFIBUS DP, PROFINET ports		(1)	(1)					
IEC61850 & Comtrade						(1)	(1)	(1)
Modbus RTU Slave on serial, modem or infrared ports (If equipped with modem or infrared port)	1	(1)	(1)	■	■	■	■	■
Modbus RTU Master on serial ports						■	■	■
Modbus/TCP on Ethernet ports		■	■	■	■	■	■	■
DNP 3.0 on serial, modem, infrared ports						■	■	■
Ethernet Gateway: 31 other meters accessible via RS-485			■	■	■	■	■	■
Multiple masters over Ethernet			3	(42)	(42)	(2)	(2)	(2)
Email alarming				■	■	■	■	■
On-board web server				■	■	■	■	■
XML				■	■	■	■	■
Analog inputs				(2)	(2)	(4)	(4)	(4)
Analog outputs				(2)	(2)	(4)	(4)	(4)
Digital status/counter inputs (standard/optional add-ons)	2	1	2	1 / (6)	1 / (6)	8/8	8/8	8/8
Digital relay outputs (control/pulse)	2	1	2	1 / (2)	1 / (2)	7	7	7
<b>Setpoints, alarming and control</b>								
Setpoints, minimum response time		■	■	■	■	½ cycle	½ cycle	½ cycle
Math, logic, trig, log, linearization formulas		and/or, > <	and/or, > <	■	■	■	■	■
Single- and multi-condition alarms		■	■	■	■	■	■	■
Call-out on alarm		■	■	■	■	■	■	■
<b>Revenue metering</b>								
ANSI C12.16 accuracy compliant	1S			■	■		■	■
ANSI C12.20		0.5S	0.2S	0.5S	0.5S		0.2S	0.2S
EN50160					■			
IEC 60687 0.2S compliant		■	■				■	■
IEC 60687 accuracy class 0.5S compliant	■	■	■				■	■
ANSI class 10 (5A nominal, 10A max)				■	■			
ANSI class 2, IEC 1/10 (1A nominal, 10A max)							■	■
ANSI class 20, IEC 5/20 (5A nominal, 20A max)							■	■
MV-90 on serial; Ethernet ports						■		
Time-of-use							■	■
Transformer/line loss compensation							■	■

Some features are optional. Refer to datasheets for allowable port configurations. Products meet or exceed the accuracy requirements of the standards listed; due to form factors, not all ANSI/IEC compliance tests may apply. Some products certified by third-party laboratory.

### Basic Monitoring of Electrical Power Systems

The **PAC3100** is a powerful compact power monitoring device that is suitable for use in industrial, government and commercial applications, where basic metering and energy monitoring is required. The meter may be used as a stand alone device monitoring over 25 parameters or as part of an industrial control, building automation or global power monitoring system. Metering and monitoring applications range from simple analog volt and amp meter replacements to stand-alone sub-billing or cost allocation installations.

The PAC3100 has many features not usually found in this price class of meters. A large graphical display supports multiple languages and easy to use menus that can be used to set up the meter. The meter also has built in Modbus RTU communications via a RS485 interface. The meter comes standard with two digital inputs and outputs. One output is suitable for pulse output for export/import real and reactive energy. The other output is controllable from an outside source by way of a Modbus register.

#### Precision

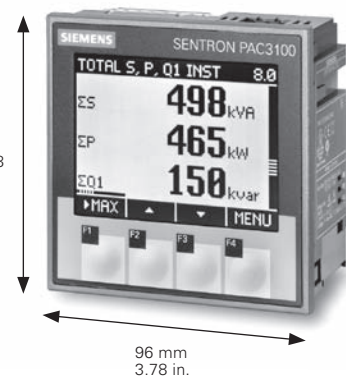
- ANSI C12.16 Class1s
- Energy Measurement
  - Voltage +/- 1%
  - Current +/- 1%
  - Power Factor +/- 1%
  - Sampling Rate 64/per cycle
- Revenue Accurate
  - Sub Billing
  - Cost Allocation
- Cost Effective

#### Energy Management

- Energy Consumption
- Demand Control
- Automation Integration
- Solution for LEED® credit
- Monitors Critical Equipment
- Sub Metering


#### Reliability

- Economical Measurement
  - Commercial
  - Industrial
  - Residential
- Degree of Protection
  - Front – IP65
  - Rear – IP20
- 480V Connected Voltage
- Simple Retrofit Installation
- Integration with Existing Systems



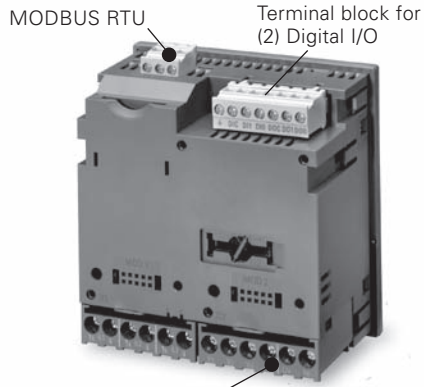
96 mm  
3.78 in.

96 mm  
3.78 in.



**Example of operating menu**

With an easy-to-read adjustable back lit LCD display, the PAC3100 can be commissioned in only two steps. After selecting the language and setting two parameters (voltage and current inputs), the meter is ready for use.<sup>①</sup>



MODBUS RTU

Terminal block for (2) Digital I/O

Terminals for current and voltage

### Order information

Product	Catalog Number <sup>②</sup>
PAC3100 compression terminals AC/DC	7KM3133-0BA00-3AA0
Adapter Plate for 4700/4720 meter cutout	93-47ADAPTER
PAC32/4200 Meter DIN Rail adapter – Meter display will not be seen	7KM9900-0YA00-0AA0

<sup>①</sup> Languages included as standard in the meter are English, German, French, Spanish, Italian, Portuguese, Turkish, Russian and Chinese.

<sup>②</sup> Omit dashes from part numbers when ordering except on 93-47ADAPTER.



# Power Distribution Solutions

## PAC3200 Power Meter

### Reliable and Precise Monitoring of Electrical Power Systems

The **PAC3200** is a powerful compact power monitoring device that is suitable for use in industrial, government and commercial applications where basic metering and energy monitoring is required. The meter may be used as a stand alone device monitoring over 50 parameters or as part of an industrial control, building automation or global power monitoring system. Metering and monitoring applications range from simple analog volt and amp meter

replacements to stand-alone sub billing or cost allocation installations with multiple tariffs.

The PAC3200 provides open communications using Modbus RTU/TCP, PROFIBUS-DP, and PROFINET protocols for easy integration into any local or remote monitoring system. Simple configuration of the meter can be done from the front display.

#### Precision

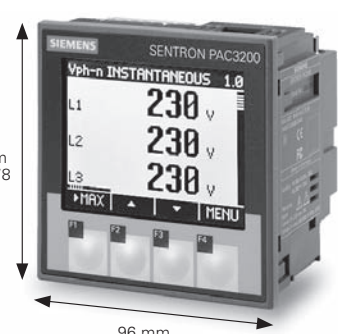
- ANSI C12.20 Class 0.5s
- Energy Measurement
  - Voltage +/- .3%
  - Current +/- .3%
  - Power Factor +/- .5%
  - Sampling Rate 64/per cycle
  - Total Harmonic Distortion (THD)
- Revenue Accurate
  - Sub Billing
  - Cost Allocation
- Cost Effective

#### Energy Management

- Energy Consumption
- Automation Integration
- Solution for LEED® credit
- Monitors Critical Equipment
- Modbus TCP/RTU
- Industrial Systems
  - PROFIBUS
  - PROFINET


#### Reliability

- Economical Measurement
  - Commercial
  - Industrial
  - Residential
- Degree of Protection
  - Front – IP65
  - Rear – IP20
- 600V Connected Voltage
- Simple Retrofit Installation
- Integration with Existing Systems

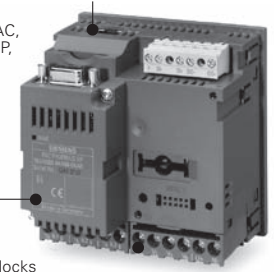


96 mm  
3.78 in.

96 mm  
3.78 in.



Example of operating menu:  
The texts can be displayed in several languages, which can be selected directly on the device.① The large graphic LCD display facilitates reading even from a distance. For optimum visibility even in poor light conditions the PAC3200 comes with a gradually adjustable background illumination.



Modbus TCP integrated into the meter as standard

SENTRON PAC, PROFIBUS DP, MODBUS RTU and PROFINET expansion modules for remote data transmission

Terminal blocks for voltage and current measuring, control power and digital input and output (available with compression terminals)

### Order information

Product	Catalog Number <sup>②</sup>
PAC3200 compression terminals not suitable for use with ring tongue terminals, AC/DC	7KM2112-0BA00-3AA0
PAC3200 compression terminals not suitable for use with ring tongue terminals, DC only	7KM2111-1BA00-3AA0
PAC PROFIBUS DP expansion module	7KM9300-0AB00-0AA0
PAC MODBUS RTU expansion module	7KM9200-0AB00-0AA0
PAC PROFINET expansion module	7KM9300-0AE01-0AA0
Connector block suitable for use with ring tongue terminals	Consult Siemens Sales
Adapter Plate for 4700/4720 meter cutout	93-47ADAPTER
SITOP Power Supply AC 99-264VAC, 24 VDC, 0.5A	6EP1331-2BA10
PAC3200/4200 Meter DIN Rail adapter – Meter display will not be seen	7KM9900-0YA00-0AA0

① Languages included as standard in the meter are English, German, French, Spanish, Italian, Portuguese, Turkish, Russian and Chinese.  
② Omit dashes from part numbers when ordering except on 93-47ADAPTER.

# Power Distribution Solutions

## PAC4200 Power Meter

### Reliable and Precise Monitoring of Electrical Power Systems

The **PAC4200** is a feature packed power monitoring device that is suitable for use in industrial, government and commercial applications where basic to advanced metering, logging, and I/O is required. The meter may be used as a stand alone device monitoring over 200 parameters or as part of an industrial control, building automation or global enterprise wide monitoring system.

Advanced power quality monitoring and logging applications range from single low voltage breaker / building metering to sub-station main feeder monitoring, sub-billing or cost allocation installations with multiple tariffs. Whether your goal

is to reduce operation cost, reduce your carbon footprint or to maintain your power assets, the PAC4200 meter should be an important part of your power monitoring system.

The PAC4200 provides open communication using the standard built-in Ethernet Modbus TCP and has the capability of communicating through Optional Modbus RTU, PROFIBUS-DP, and PROFINET protocol modules simultaneously. This allows for easy integration into any local or remote monitoring system. The gateway functionality of this device reduces installation cost by replacing other gateway devices and simplifying wiring.

### Precision

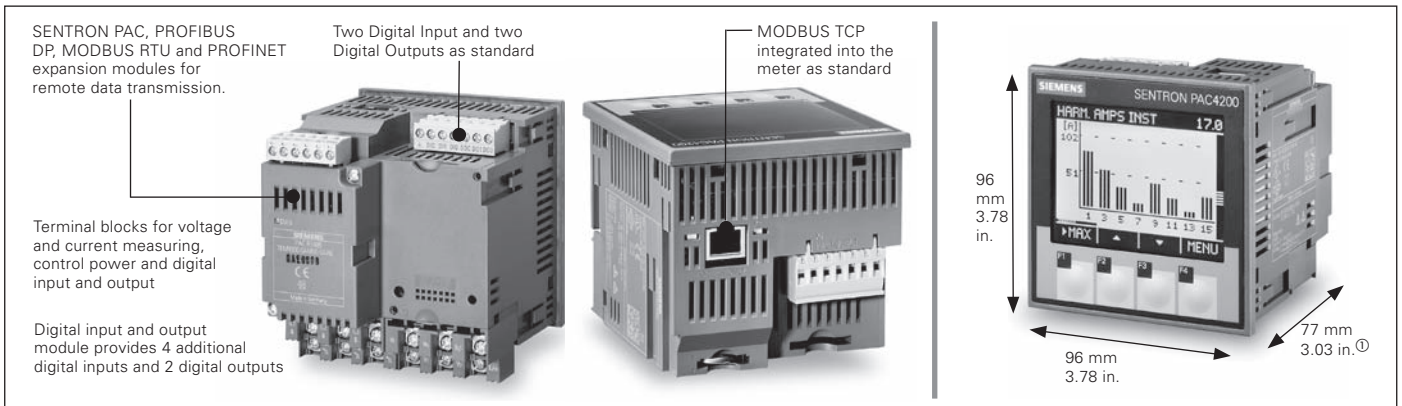
- ANSI C12.20 Class .2s
- Energy Measurement
  - Voltage +/- .2%
  - Current +/- .2%
  - Power Factor +/- .5%
  - Sampling Rate 170/per cycle
  - Individual Harmonics up to 31st
- Power Quality
- Revenue Accurate
  - Sub Billing
  - Cost Allocation
- Cost Effective

### Energy Management

- Serves two masters via the TCP connection
- Energy Consumption
- Min/Max and Event Logs
  - Storage Capacity 40 days at 15 min intervals
  - Event Logging 4000 events
- Demand Control
- Automation Integration
- Modbus Gateway
- Modbus TCP/RTU
- Industrial Systems
  - PROFIBUS
  - PROFINET

### Reliability

- Monitors Critical Equipment
- Economical Measurement
  - Commercial
  - Industrial
- Degree of Protection
  - Front – IP65
  - Rear – IP20
- 600V Connected Voltage
- Customizable Displays
- Simple Retrofit Installation
- Integration with Existing Systems
- Solution for LEED® credit



### Order information

Product	Catalog Number <sup>②</sup>
PAC4200 compression terminals not suitable for use with ring tongue terminals, AC/DC	7KM4212-0BA00-3AA0
PAC4200 Compression Terminals DC only	7KM4211-1BA00-3AA0
PAC PROFIBUS DP expansion module	7KM9300-0AB00-0AA0
PAC MODBUS RTU expansion module	7KM9200-0AB00-0AA0
PAC PROFINET expansion module	7KM9300-0AE01-0AA0
PAC I/O module 4DI + 2DO	7KM9300-0AM00-0AA0
Connector block suitable for use with ring tongue terminals	Consult Siemens Sales
Adapter Plate for 4700/4720 meter cutout	93-47ADAPTER
PAC32/4200 Meter DIN Rail adapter – Meter display will not be seen	7KM9900-0YA00-0AA0
SITOP Power Supply AC 99-264VAC, 24 VDC, 0.5A	6EP1331-2BA10

① 99mm, 3.90 in., with expansion module  
② Omit dashes from part numbers when ordering except on 93-47ADAPTER.

# Power Distribution Solutions

## 9340 / 9360 Power Meter Web-Enabled

### Reliable and Precise Monitoring of Electrical Power Systems

The Siemens **ACCESS 9340/9360** series power meters combine accurate, 3-phase energy and power measurement with data logging, power quality analysis, alarm, and I/O capabilities not typically available in a compact meter. The meters are ideally suited to local and remote monitoring of low or high voltage electrical installations in industrial facilities, commercial buildings, utility networks or critical power environments. Facility and operations personnel will benefit in energy related costs while avoiding power quality conditions that can reduce equipment life and productivity.

ACCESS 9340/9360 series meters are easy to install and use, offering integrated or remote high-visibility displays. A choice of two models and a range of expansion modules help match features to the application and support field-upgrading of meters as required. Serial and Ethernet communication options enable the meters to be used within a Siemens power management system or with third-party automation systems.



#### Precision

- ANSI C12.20 Class 0.5s
  - Energy Measurement
  - Voltage +/- .1%
  - Current +/- .1%
  - Power Factor +/- .5%
  - Sampling Rate 128/per cycle
  - 9340 Individual Harmonics up to 31st
  - 9360 Individual Harmonics up to 63rd
  - 9360 Sags / Swells Detection
  - Programmable Math / Logic Function
- Revenue Accurate
  - Sub Billing
  - Cost Allocation

#### Energy Management

- Energy Consumption
- 9360 Waveform Capture
- Customizable Webpages
- Min/Max and Event Logs
  - 9340 Storage Capacity 80kb
  - 9360 Storage Capacity 800kb
- Demand Control
- Automation Integration
- Solution for LEED® credit
- Monitors Critical Equipment
- Modbus Gateway
- Modbus TCP/RTU
- Industrial Systems

#### Reliability

- Economical Measurement
  - Commercial
  - Industrial
- Degree of Protection
  - Front – IP52
  - Rear – IP30
- 600V Connected Voltage
- Customizable Displays
- Email Alarms through Ethernet
- Field Addable Modules
- Simple Retrofit Installation
- Integration with Existing Systems

#### Order information

Meter with integrated display	Catalog Number
ACCESS S 9340 meter with display, THD, alarming, 80 kb logging	9340DC
ACCESS 9360 meter with display, THD, alarming, 800 kb logging, configurable waveform sag, swell detection	9360DC
Meter with remote display	Catalog Number
ACCESS 9340 meter with remote display, basic instrumentation, THD, alarming, 80 kb logging	9340RC
ACCESS 9360 meter with display, THD, alarming, 800 kb logging, configurable waveform sag, swell detection	9360RC
Meter without display	Catalog Number
ACCESS 9340 meter without display, THD, alarming, 80 kb logging	9340TC
ACCESS 9360 meter without display, THD, alarming, 800 kb logging, configurable waveform sag, swell detection	9360TC
Remote display, adapter and accessories	Catalog Number
ACCESS 9340 display adapter kit	9340-DISPKIT
ACCESS 9360 display adapter kit	9360-DISPKIT
ACCESS 9340 and 9360 display adapter	9340-60-DISPADA
ACCESS 9340/60 gasket analog meter round	9340-60-GASKET
ACCESS 9340/60 I/O module, 2 relay output, 6 digital input	9340-60-I/O26
ACCESS 9340/60 I/O module, 2 relay output, 2 digital input, 2 analog input, 2 analog output	9340-60-I/O2222
ACCESS 9340/60 ethernet communication card	9340-60-ETHER
ACCESS 9340/60 RJ11 extender kit	9340-60-RJ11EXT

# Power Distribution Solutions

## 9510 / 9610 Power Quality Meter

### Power Quality Meter with Web Server Technology

These high power quality meters are packed with features such as the ability to determine the location of a disturbance quickly and accurately and determine the direction of the disturbance relative to the meter. Analysis results are captured in the event log, along with a time-stamp and confidence level indicating level of certainty. The 9510/9610 base meter includes 8 digital inputs capable of providing 1 millisecond time stamping and 7 digital outputs. The 9510/9610 meters support numerous protocols including IEC61850 and Comtrade.

Fast sampling rates and extensive memory make this the perfect choice for critical power systems making analysis of issues possible for correction and prevention. As a data accumulator, the 9510 and 9610 meters can also save money and time by simplifying wiring and networking. Information from the meter and downstream devices can be displayed on the large LCD display, on customizable web pages in reports and screens.

Applications for the 9510 and 9610 meters range from critical power applications such as data centers to industrial, commercial and government power and power quality monitoring systems. The 9510 and 9610 meters are offered in a number of forms from single meter enclosures integrated into Siemens switchgear, switchboard and panelboards. Place these high end power quality meters throughout the power distribution system where critical information is desired. Know what is happening in your facility and get maximum efficiency.



### Precision

- ANSI C12.20 Class .2s
- Energy Measurement
  - Voltage +/- .01%
  - Current +/- .01%
  - Power Factor +/- .5%
  - 9510 Sampling Rate 256/per cycle
  - 9610 Sampling Rate 512/per cycle
  - 9610 XH Sampling Rate 1024/per cycle
  - 9510 Individual Harmonics up to 127th
  - 9610 Individual Harmonics up to 256th
  - Sags / Swells Detection
  - Programmable Math / Logic Function
- Revenue Accurate
  - Sub Billing
  - Cost Allocation

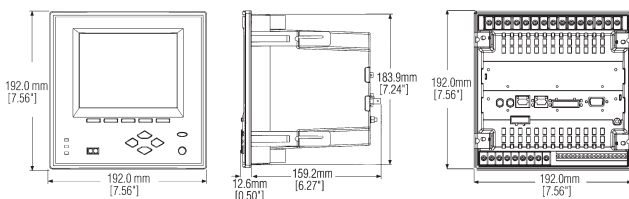
### Energy Management

- Energy Consumption
- Waveform Capture
- Transient Capture 17  $\mu$ s @ 60 Hz
- Disturbance Direction Detection (DDD)
- Customizable Webpages
- Min/Max and Event Logs
  - Storage Capacity up to 3.3 years at 15 min intervals
  - Event Logging up to 20,000
  - Waveform Captures up to 390
- Demand Control
- Automation Integration
- Monitors Critical Equipment
- Modbus Master / Gateway
- Supports Multiple Protocols
- Supports Multiple Master via Ethernet

### Reliability

- Economical Measurement
  - Commercial
  - Industrial
- 600V Connected Voltage
- Transformer Line Loss Compensation
- Email Alarms
- Customizable Displays
  - Event / Alarm Log
  - Trending
  - Phasor Diagrams
- Password Protected
- Hardware Lockable
- Supports Copper or Fiber Ethernet
- Integration with Existing Systems

#### Meter with integral display dimensions

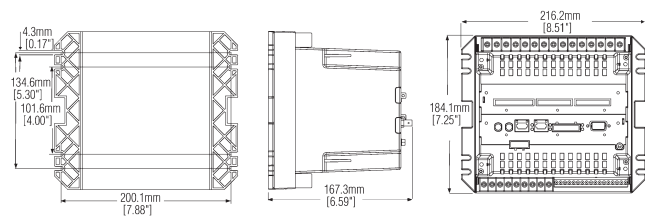


Front view

Side view

Front view,  
TRAN model

#### Meter transducer unit (w/o display) dimensions



Back View

Side view,  
TRAN model

Rear view,  
TRAN model



# Power Distribution Solutions

## 9510 / 9610 Power Quality Meter

Order Information for 95/9610 Power Meters

### Catalog Number

9	X	1	0	D	C	1	1	5	6	C	Z	Z	A
---	---	---	---	---	---	---	---	---	---	---	---	---	---

### Description

<b>Meter base unit and display options</b>													
• Meter with integrated display and 5MB logging memory													
• Meter with integrated display and 10MB logging memory													
• Meter without display (Tran version) and 5MB logging memory													
• Meter without display (Tran version) and 10MB logging memory													
<b>Sampling rate</b>													
• Standard sampling (256 for 9510) ( 512 for 9610) per cycle maximum													
• 1024 Samples per cycle (9610 only)													
<b>Power Supply</b>													
• 85-240 Vac / 110-300 Vdc													
• 20-60 Vdc													
<b>Input Voltage</b>													
• 120 to 347 L-N / 208 to 600 L-L V AC													
<b>Input Current</b>													
• 1A Nominal (10 Amp full scale)													
• 5A Nominal (20 Amp full scale)													
<b>Frequency</b>													
• 50 Hz													
• 60 Hz													
<b>Communication Cards</b>													
RS232/RS485 (Selectable)	RS485	Infrared (Note 1)	Modem (Notes 1 & 2)	10/100 Base-T	10/100 Base-FX								
•	•	•				A							
•	•	•	•			C							
•	•	•		•		G							
•	•	•	•	•		H							
•	•	•		•	•	J							
•	•	•	•	•	•	K							
<b>Auxiliary I/O Cards</b>													
• None (base meter includes 8 digital in and 7 digital out)													
• 8 Binary Inputs; 4 Analog Inputs 0 to 20 mA and 4 Analog Outputs 0 to 20 mA													
• 8 Binary Inputs; 4 Analog Inputs 0 to 1 mA and 4 Analog Outputs -1 to 1 mA													
<b>Tropicalization Option</b>													
• None													
• Yes													
<b>Specials</b>													
• None													
• Password protected and hardware lockable (lock enabled/disabled via jumper on comm card)													
• EN50160 Compliance Monitoring (available on 9610 only)													
• EN50160 Compliance Monitoring with password protected and hardware lockable (lock enabled/disabled via jumper on comm) (available on 9610 only)													

**Note 1** – The infrared and modem connections cannot be operated simultaneously. The connection type is configurable.

**Note 2** – The listed modems are not suitable for European applications. Contact Siemens for special versions.

# Power Distribution Solutions

## 9510 RTU Data Concentrator

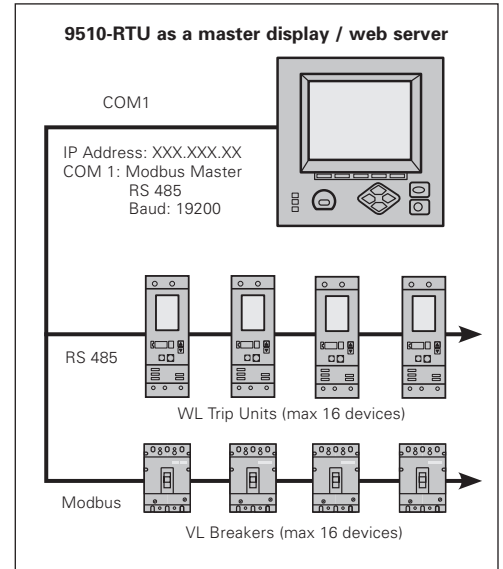
Siemens Advanced Data Recorder and Central Display



The **9510-RTU** unit can serve many uses through out a facility. This low-cost central display - data recorder can provide HTML web pages and customizable displays to allow easy access to the data and provide E-mail alarming for critical information. This multi-functional unit supports communications to any Modbus RTU device and digital / analog I/O, allowing the 9510-RTU to provide solutions for many different applications.

### Features

- Monitor breaker status changes with 1ms resolution
- Collect, log, and scale pulse inputs from water, air, gas, electricity, or steam meters
- Act as an Ethernet gateway for serial devices
- Display Modbus slave information and make available as a web page
- Log and e-mail down stream Modbus device data
- Display trip unit data from WL, VL, Static Trip III® and SB-EC devices®
- Trigger and email alarms based on setpoint conditions
- Display feeder energy information for LEED certification
- Engineering service required to setup the 9510-RTU features



### Catalog Number

9	5	1	0	E	C	1	R	T	U	G	Z	Z	A
---	---	---	---	---	---	---	---	---	---	---	---	---	---

### Description

#### Meter base unit and display options

Option #1 – Meter with integrated display and 5MB logging memory	D
Option #2 – Meter with integrated display and 10MB logging memory	E
Option #3 – Meter without display, with a 5MB logging memory (TRAN version)	T
Option #4 – Meter without display with a 10MB logging memory (TRAN version)	U

#### Communications

ION / Modbus RTU - Factory configured for ION	C
---	---

#### Power Supply

85-240 Vac / Vdc	1
20-60 Vdc	2

#### No Display Option

Remote transducer option	R	T	U
--------------------------	---	---	---

#### Communication Cards

RS232/RS485 (Selectable)	RS485	Infrared (Note 1)	Modem (Notes 1 & 2)	10/100 Base-T	10/100 Base-FX	
.	.	.				A
.	.	.	.			C
.	.	.		.		G
.	.	.	.	.		H
.	.	.	.	.	.	J
.	.	.	.	.	.	K

#### Auxiliary I/O Cards

None (base meter includes 8 digital in and 7 digital out)	Z
8 binary inputs; 4 Analog Inputs 0 to 20 mA and 4 Analog Outputs 0 to 20 mA	F
8 binary inputs; 4 Analog Inputs 0 to 1 mA and 4 Analog Outputs -1 to 1 mA	G

#### Tropicalization Option

None	Z
Yes	T

#### Specials

Standard (password protected, no locking or sealing)	A
--	---

**Note 1** – The infrared and modem connections cannot be operated simultaneously. The connection type is configurable.  
**Note 2** – The listed modems are not suitable for European applications. Contact Siemens for special versions.

# Power Distribution Solutions

## Enclosed Meters

### Convenience and Reliability with Siemens Meter Enclosures

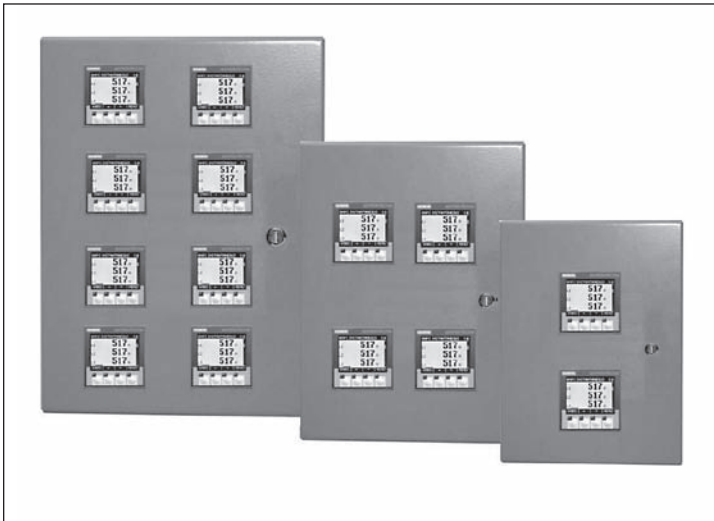
The Siemens meter enclosure offering is available to order with the SENTRON PAC series meters, the ACCESS series meters, and a combination of both power meter product offerings. The enclosed meter offering provides the required energy and basic metering information needed for a typical sub-billing / cost allocation application, as well as providing a simple retrofit solution for any project.

With Safety being paramount, Siemens has designed the meter enclosure product offering with many safety and convenience features in mind. These include a single circuit breaker for both the control voltage & voltage taps to protect internal wiring and the power meters from damage and allowing a "single source" disconnect from outside power, separate CT shorting blocks for each meter, a grounding lug, and the Modbus serial communications will be terminated to one location for ease of network installation.

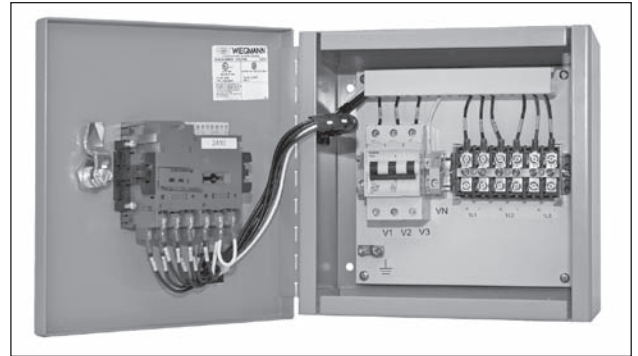
The Siemens meter enclosure solutions are delivered with all the required components pre-installed prior to shipment. All components will be mounted to a back plate in the enclosure and for applications above 240 volts, a CPT will be provided for control.

For low cost and simple tenant monitoring, sub-billing or industrial cost allocation, turn to Siemens metering units. Installed in rugged NEMA 1 or NEMA 12 enclosures, these metering units are ideal for:

- Property Management Firms
- Government Applications
- Universities
- Corporate Campus Facilities
- Malls
- Food Courts
- Building Retrofits



Ⓢ PAC3100 standard is Modbus RTU.  
 Ⓢ PAC3200 and PAC4200 Standard is Modbus TCP.  
 Ⓢ Modules not available on PAC3100.



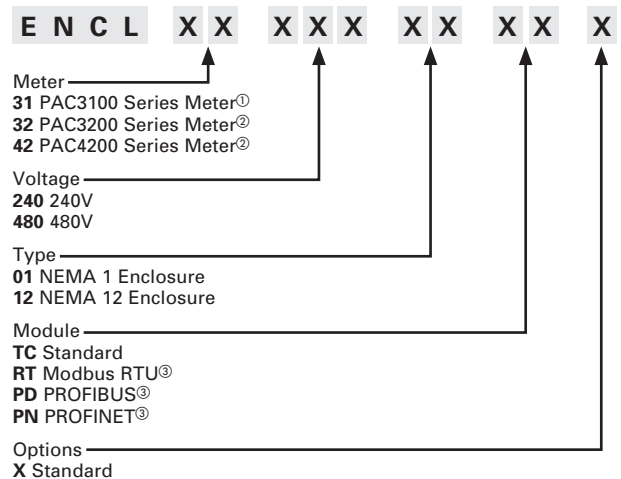
### Features:

- Rugged design and small footprint for easy installation
- Bright, easy-to-read LCD display
- Multiple configurations
- Packaged by voltage and current ratings to accommodate any installation
- Utilizes 5A secondary current input for improved accuracy and increased compatibility

### Benefits:

- Replace multiple utility meters with one enclosure, saves wall space
- Consolidate utility bills for sub-billing and energy management, bill tenants on actual usage
- Improve energy efficiency
- Aggregate energy purchases for reduced rates
- Improve productivity when coupled with Siemens software solutions or third party billing software

### Catalog Logic:



Meter Enclosure Without Meter	
Catalog Number	Description
ENX24001-121208	12W x 12H x 8D NEMA 1 Enclosure 240V
ENX24012-121208	12W x 12H x 8D NEMA 12 Enclosure 240V
ENX48001-121208	12W x 12H x 8D NEMA 1 Enclosure 480V
ENX48012-121208	12W x 12H x 8D NEMA 12 Enclosure 480V

# Power Distribution Solutions

## Branch Circuit Monitoring / Embedded Metering

Space Savings, Convenience, and Reliability with Siemens Branch Circuit Monitoring



In a world where tenant square footage is a premium in commercial building designs, the area for electrical metering is being drastically reduced, and critical power is being relied upon in data centers applications, Siemens Branch Circuit Monitoring provides the solution.

The Siemens Branch Circuit Monitoring Solution utilizes the metering and monitoring technology integrated into the space saving panelboards from Siemens. When compared to the typical external wall mounted metering installations, considerable savings in space, installation costs, and data collection are realized with the Siemens Branch Circuit Monitoring Solution.

In addition, contractor labor costs for installation of sub-metering systems continues to increase. Still, building owners and property management companies must face the challenges of how to cost effectively provide tenant sub-metering in the constrained spaces.

To meet the sub-metering challenges of designers, contractors and property management companies, Siemens offers a proven cost-effective solution for Branch Circuit Monitoring/Embedded Metering. This solution combines a fully integrated metering system factory installed into the Siemens "P" series panel boards and switchboards, which along with the required local or remote sub-billing software, provides a "Total" sub-metering system.

### Siemens Branch Circuit Monitoring / Embedded Metering Solution

- Saves you money – A tenant billing system improves cash flow, allows immediate pass-on of electric rate increases and helps building owners control costs. Tenants are confident they are paying their fair share for energy use and are saving money through energy conservation.
- Fast, low-cost installation – The embedded Siemens solution provides a faster and lower cost installation compared to other external systems.
- Lower space requirements – The embedded panelboard construction design requires no additional wall space to provide tenant metering. Conventional metering requires an external metering enclosure and possibly a current transformer transition cabinet.
- Reliable and accurate – Many Siemens systems are already in operation in large commercial and residential buildings around the country. Their accuracy exceeds utility industry and government standards like EPact 2005 for revenue grade meters.
- LEED certification – Provides the energy monitoring and logging required to achieve additional LEED points.
- Automated billing – With automated billing services the responsibility to acquire the data, store the data and bill the tenants is removed from the property management company, thus saving manpower and time.
- Responsive service – With remote monitoring, continuous 24/7 monitoring can be done by the property management company or tenants. The service can also relay consumption changes to the owners for immediate investigation.

### Designer and contractor benefits include:

- Much smaller footprint versus the traditional socket meter combo units
- Factory pre-wired – less installation time
- Drastically less installation wiring
- No CT installation required in the field
- All equipment fits into the standard Siemens panel design
- Additional utilities like water, air and gas can be easily integrated into the system for a comprehensive monitoring system
- Hardwire and wireless communication options
- All components factory calibrated to meet revenue metering requirements
- Additional meters can be added in the field
- UL and CSA-us listed

### Branch Circuit Monitoring applications include:

- Mixed Tenant & Retail
- Industrial Manufacturing
- Higher Ed
- Strip Malls
- Critical Power
- Government
- LEEDS buildings
- Airports

Please Contact Your Siemens Sales Engineer for additional information regarding Branch Circuit Monitoring / Embedded Metering

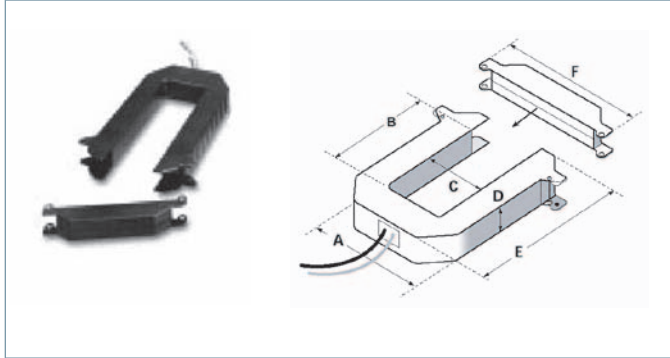


# Power Distribution Solutions

## Low Voltage Current Transformers

Comprehensive metering grade CT offering split-core, flexible and solid core designs

### Split core – Rectangular Window



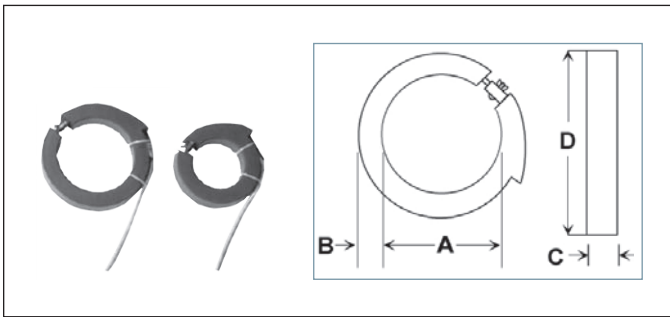
Siemens Instrument Grade Current Transformers (CT) have a split-core construction and provide a safe 5A secondary output. These split-core current transformers allow for easy installation, retrofit, and service. CT's come with 4' leads (18 gauge). Use on low voltage applications of 600V or less.

**Accuracy 0.5%.**

200A – 300A	400A – 800A	1000A – 1200A
A = 3.75" (95mm)	A = 4.90" (124mm)	A = 4.90" (124mm)
B = 1.51" (38mm)	B = 2.89" (73mm)	B = 5.50" (140mm)
C = 1.25" (32mm)	C = 2.45" (62mm)	C = 2.45" (62mm)
D = 1.13" (29mm)	D = 1.13" (29mm)	D = 1.13" (29mm)
E = 4.20" (107mm)	E = 5.57" (141mm)	E = 8.13" (207mm)
F = 4.75" (121mm)	F = 5.91" (150mm)	F = 5.92" (150mm)

Amps	Window (C x B)	Catalog Number
100A	1.25"x1.15"	PDS-CTSC-011
200A	1.25"x1.51"	PDS-CTSC-021
300A	1.25"x1.51"	PDS-CTSC-031
400A	2.45"x2.89"	PDC-CTSC-042
600A	2.45"x2.89"	PDS-CTSC-062
800A	2.45"x2.89"	PDS-CTSC-083
1000A	2.45"x5.50"	PDS-CTSC-013
1200A	2.45"x5.50"	PDS-CTSC-123
1600A	2.45"x5.50"	PDS-CTSC-163
2000A	2.45"x5.50"	PDS-CTSC-200
3000A	2.75"x6.625"	PDS-CTSC-03R

### Split-core – Round Window



Split-core round rubber insulated flexible CT's with 12' heavy duty leads (18 AWG) and 5A secondary output for use on low voltage applications of 600V.

**Accuracy is 4% for 200/400A, 3% for 400A, and 2% for 600A and above.**

200A – 1200A	3000A – 4000A
A = 4.00"	A = 6.00"
B = 1.25"	B = 1.25"
C = 1.50"	C = 1.50"
D = 6.50"	D = 8.50"

Amps	Window (A)	Catalog Number
200A	4.00"	PDS-CTHC-024
300A	4.00"	PDS-CTHC-034
400A	4.00"	PDC-CTHC-044
600A	4.00"	PDS-CTHC-064
800A	4.00"	PDS-CTHC-084
1200A	4.00"	PDS-CTSC-123
2000A	6.00"	PDS-CTHC-206
3000A	6.00"	PDS-CTHC-306
4000A	6.00"	PDS-CTHC-406

# Power Distribution Solutions

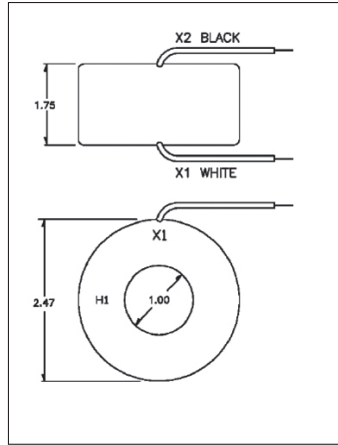
## Low Voltage Current Transformers

Comprehensive metering grade CT offering split-core, flexible and solid core designs

### Solid-core – Round with Round Window

The small size solid core Current Transformer (CT) are designed for tight locations and new installations providing a safe 5 amp secondary for use on voltage applications of 600V or less.

**Accuracy is 0.3%.**

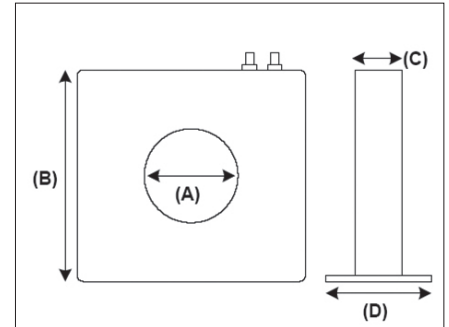


Solid core – Round metering grade, 600V		
Catalog Number	Primary	Size
SMU-CT-011	100A	1.75" x 2.47", 1" Window
SMU-CT-021	200A	1.75" x 2.47", 1" Window
SMU-CT-025	250A	1.75" x 2.47", 1" Window
SMU-CT-031	300A	1.75" x 2.47", 1" Window
SMU-CT-041	400A	1.1" x 3.56", 1.56" Window
SMU-CT-061	600A	1.1" x 3.56", 1.56" Window
SMU-CT-081	800A	1.1" x 3.56", 1.56" Window
SMU-CT-123	1000A	1.1" x 3.56", 1.56" Window
SMU-CT-02R	2000A	1.15" x 5.73", 3.25" Window

### Solid-core – Square with Round Window

Siemens Instrument Grade Current Transformers (CT) are designed as solid-core construction and provide a safe 5A secondary output. Solid-core CT's come with terminals for attaching leads. Use on low voltage applications of 600V or less.

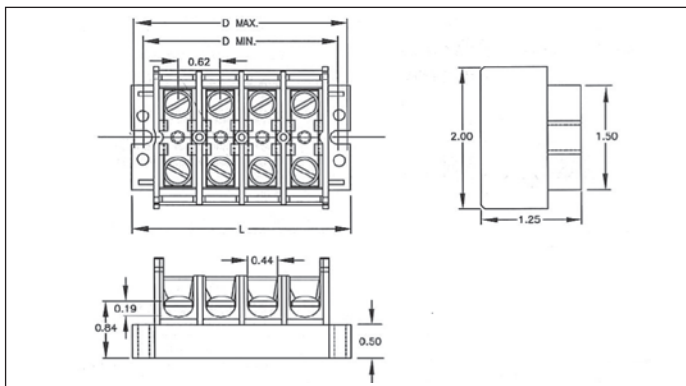
**Accuracy is 0.3%.**



Amps	Dimension (A x B x C x D)	Catalog Number
200:5	1.25" x 4.88" x 2.19" x 4.68"	PDS-CTRC-021
300:5	1.25" x 4.88" x 2.19" x 4.68"	PDS-CTSC-031
400:5	1.25" x 4.88" x 2.19" x 4.68"	PDS-CTRC-041
500:5	1.25" x 5.10" x 3.00" x 5.50"	PDC-CTRC-051
600:5	1.25" x 5.10" x 3.00" x 5.50"	PDS-CTRC-061
800:5	1.25" x 5.10" x 3.00" x 5.50"	PDS-CTRC-081
1000:5	1.25" x 5.10" x 3.00" x 5.50"	PDS-CTRC-101
100:5	2.25" x 6.31" x 3.00" x 5.82"	PDS-CTRC-012
200:5	2.25" x 6.31" x 3.00" x 5.82"	PDS-CTRC-022
300:5	2.25" x 6.31" x 3.00" x 5.82"	PDS-CTRC-032
400:5	2.25" x 6.31" x 3.00" x 5.82"	PDS-CTRC-042
800:5	4.00" x 6.44" x 3.25" x 3.25"	PDS-CTRC-084
1000:5	4.00" x 6.44" x 3.25" x 3.25"	PDS-CTRC-104
1200:5	4.00" x 6.44" x 3.25" x 3.25"	PDS-CTRC-124
1600:5	4.00" x 6.44" x 3.25" x 3.25"	PDS-CTRC-164
2000:5	4.00" x 6.44" x 3.25" x 3.25"	PDS-CTRC-204
3200:5	6.50" x 9.88" x 7.00" x 7.00"	PDS-CTRC-326
4000:5	6.50" x 9.88" x 7.00" x 7.00"	PDS-CTRC-426

### Shorting Block

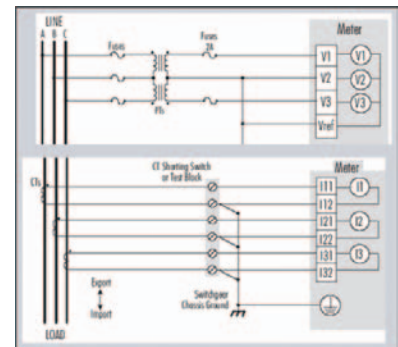
All low voltage current transformers should be installed with a shorting block to allow for easy removal of the metering unit and to provide a safe method for disconnecting the CT signal. One shorting block is required per meter. Various size shorting blocks are available; 4, 6, and 8 pole configurations are available with four slotted shorting screws and cover. Wire size is 18-10 AWG.



Catalog Number	Mounting			
	Ckts.	L	D min.	D max.
IKU4SC	4	3.25	2.88	3.00
IKU6SC	6	4.50	4.12	4.25
IKU8SC	8	5.75	5.38	5.50
IKU12SC	12	8.25	7.88	8.00

### Typical electrical meter CT and shorting block installation

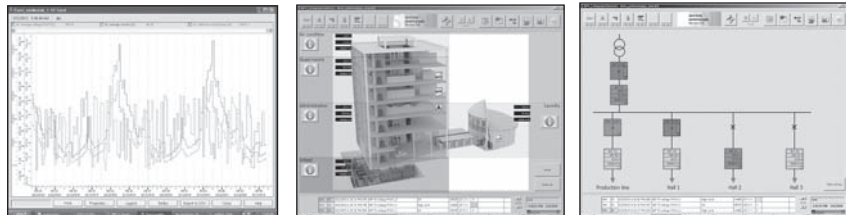
This example shows a common three phase, three wire installation where three CT's and one shorting block are used.



# Power Distribution Solutions

## Powermanager

**A power management system that can be customized to your needs.  
View and control your facilities' infrastructure condition from anywhere.**



**SENTRON Powermanager** software, combined with Siemens power meters and low voltage protective devices, provides a complete energy management solution for your business. It allows you to measure, process, analyze, store and share energy usage and status information across your entire enterprise. It offers control capabilities, comprehensive energy usage and reliability, and detailed reporting that will help you reduce energy related costs.

### Cost allocation and Sub-billing Reports

Cost allocation and sub-billing functionality in the Powermanager software allows the user to track energy related costs by building, floor, tenant, feeder or location. Match virtually any fixed rate billing structure and use comprehensive multi-year scheduling and time-of-use features to manage the energy costs.

### Load Studies and Asset Management

Trend power usage data to take full advantage of your electrical distribution system capacity and avoid over-design. Create usage profiles that will allow you to distribute loads and avoid demand peak which helps to identify energy leaks such as equipment running during down time.

### Equipment Monitoring and Control

Powermanager allows you to meter all your utilities including gas, steam, air and water and set up general condition alarming and pre-event alarms for impending or imminent conditions. Interface with other energy management and SCADA systems through multiple communication channels and protocols like OPC.

### Reports

Standard reports provide models of daily electricity usage so you can distribute loads and avoid demand peaks. This enables you to allocate energy consumption and/or costs to individual areas and identify expensive processes that need attention. The historic trending report compiles data from load circuits over a users predefined period. This enables the user to fully utilize the power distribution system and run at near rated tolerances.

### Ordering information

Powermanager Software and Device License	Catalog Number
Trial License 10 devices, feature packages "Expert" and "Web," 30 days	3ZS27110CC200YA7
Lean License 10 devices	3ZS27110CC200YA0
Lean Plus License 10 devices, feature packages "Expert" and "Web"	3ZS27118CC200YA0
Standard Plus License 50 devices, feature packages "Expert" and "Web"	3ZS27128CC200YA0
Advanced Plus License 100 devices, feature packages "Expert" and "Web"	3ZS27138CC200YA0
Maximum Plus License 200 devices, feature packages "Expert" and "Web"	3ZS27148CC200YA0
Powermanager Add Ons and Upgrades	Catalog Number
Lean Plus to Standard Plus Upgrade License	3ZS27120CC200YD0
Standard Plus to Advanced Plus	3ZS27130CC200YD0
Advanced Plus to Maximum Plus	3ZS27140CC200YD0
Windows Client <= 5 Expansion up to 5 total clients	3ZS27103CC200YH0
Windows Client <=10 Expansion from 5 to 10 clients, requires <=5	3ZS27104CC200YH0

Contact Siemens for upgrade information

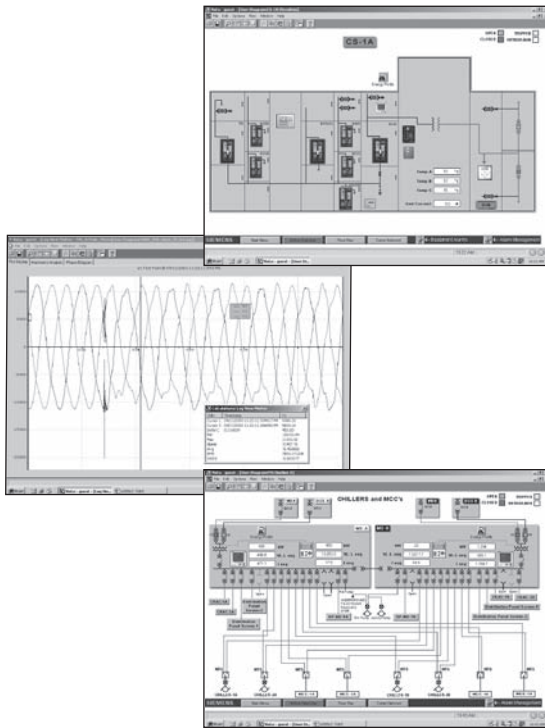
### Benefits

- Visibility and control of power flows
- Exact knowledge of the consumption profile
- Increase of energy efficiency
- Optimization of power supply contracts
- Compliance with contractual terms or regulations
- Allocation of costs to individual cost centers
- Optimization of plant maintenance
- Identification of critical systems conditions

### The Powermanager software:

- Is available in a stand-alone or LAN/WAN based configuration that can also exchange information with other supervisory systems like building automation software
- Can utilize any Ethernet or serial based connections
- Is expandable from the basic monitoring application to a fully customized enterprise management system
- Is fully scalable with regard to the connected devices and to the software's function to meet current and future needs
- Ensures the seamless integration of power monitoring devices from the Siemens SENTRON PAC series meters and SENTRON WL/VL circuit breakers as well as other Modbus communicating devices
- Is designed to collect, archive, monitor, display and evaluate any kind of energy related device data
- Provides web based reporting and detailed graphics construction utilities as standard

## WinPM.net



### Cost allocation and sub-billing

Track energy-related costs by building, feeder, or tool. Match virtually any billing structure and use comprehensive multi-year scheduling and time-of-use activity profiles.

### Load studies and asset management

Trend power usage data to take full advantage of your electrical distribution system capacity and avoid over-design. Create usage profiles so you can distribute loads and avoid demand peak.

### Demand and power factor control

Eliminate penalties through automated power factor correction, load shedding, or peak shaving.

### Equipment monitoring and control

Meter all your utilities including gas, steam, air and water. Set up alarms for pending problems, pre-alarm on impending or imminent conditions. Interface with other energy management and SCADA systems through multiple communication channels and protocols.

### Preventative maintenance

Base your maintenance schedule on actual operating history.

**WinPM.net** is a complete energy information management solution for your business allowing you to process, analyze, store and share energy usage and power quality data across your entire enterprise. It offers control capabilities, comprehensive power quality and reliability analysis and can help you reduce energy-related costs. WinPM.net allows you to manage intelligent metering and protective devices, analyze data, and decide on new courses of action to help you save money and keep your business up and running.

Its cutting-edge flexibility and compatibility means you can add one piece at a time, at your own pace, while still maintaining your original investments. Interface to your existing systems through industry-standard protocols and choose newer components as they become available.

### The WinPM.net software:

- Provides detailed analysis of the power quality and overlays waveforms to correlate phase-to-phase relationships between voltages and currents and cascading failures
- Pinpoints the sources of transients, harmonics, or sags, whether external or internal to your facility, allowing you to decide on the right corrective actions. By monitoring circuits 24 hours a day, you can develop strategies to avoid interruptions
- Provides a comprehensive graphics utility as standard to build and edit any graphical screen whether it is a standard screen or a customized one. These custom screens can display real-time and historical data, alarms, status indications, meter, relay and third party equipment information
- Supports Modbus RTU, Modbus TCP, ION, XML, OPC, FTP, and PQDIF compliant systems, so you can unify your diverse operations into one system. Interface to other energy management software, or include transducers, PLCs, and RTUs in a WinPM.net network. OPC can extract values from other software databases then combine these values with up-to-date readings from WinPM.net to perform real time calculations
- Offers easy, cost effective and fast system expansion. The system grows as your needs grow. Add one piece at a time, at your own pace, within your own budget

### Ordering information

Software	Catalog Number
WinPM.Net V6.0 DVD New (includes 5 Access meter device licenses, 1 Engineering Client, 2 web clients)	<b>3ZS67100CC600BA0</b>
WinPM.Net V6.0 DVD Replacement	<b>3ZS67100CC600BC0</b>
Device License	
ACCESS 9xxx Meter Device License Limit 6...50	<b>3ZS68120CC600BA2</b>
ACCESS 9xxx Meter Device License Limit 51...100	<b>3ZS68130CC600BA2</b>
ACCESS 9xxx Meter Device License Limit 101...1000	<b>3ZS68140CC600BA2</b>
ACCESS Comp. or Modbus/SeaBus Device License Limit 1...50	<b>3ZS68220CC600BA2</b>
ACCESS Comp. or Modbus/SeaBus Device License Limit 51...100	<b>3ZS68230CC600BA2</b>
ACCESS Comp. or Modbus/SeaBus Device License Limit 101...1000	<b>3ZS68240CC600BA2</b>
Options	
WinPM.Net Engineering Client License Limit 2...50	<b>3ZS67220CC600BA2</b>
WinPM.Net Engineering Client License Limit 51...100	<b>3ZS67230CC600BA2</b>
WinPM.Net Web Client License	<b>3ZS67420CC600BA2</b>
WinPM.Net OPC Server License	<b>3ZS67520CC600BA2</b>
WinPM.Net SQL 2008 CPU License	<b>3ZS67308CC600BA0</b>
Allows remote configuration of base WinPM.Net software. Note: WinPM.Net software will support limited Engineering client & Web client access. Additional Engineering client and Web client can be added with additional cost. Excel is required for Reporter. Outlook is required for e-mailing reports.	

Contact Siemens for upgrade information



# Power Distribution Solutions

## Application Engineering



### Application Engineering capabilities

#### Provides:

- Power Quality Reliability & Analysis
- Utilities Cost Allocation & Billing
- Utilities Usage Aggregation
- Load Preservation
- Equipment Monitoring
- Facility Monitoring & Automation
- Sequence of Event Recording
- Preventative Maintenance
- Electrical Asset Management

The Siemens Power Distribution Solutions Application Engineering team provides the required experience and knowledge to implement any system regardless of the size or complexity. Siemens Application Engineers are highly skilled professionals who understand how to combine the best PMC software and hardware to create solutions that exceed our customer's expectations.

#### Key Market Expertise:

- Commercial Construction:
  - New / Retrofit
  - Tenant / Sub Billing
- Critical Power:
  - Data Centers
  - Hospitals
  - JCAHO
- Government:
  - Local, State & Federal Government EPACT projects
  - Universities
  - Airports
- Industrial Applications:
  - Petro - Chem., Cement, Food & Beverage, Waste water, Automotive

#### PDS Custom Solutions:

- LAN – WAN based solutions using our WinPM.Net web-based software
- Custom power metering logic
- Custom billing, energy usage or load profile reports
- Integration of other utilities like gas, water, steam, air and more
- Custom interactive one-line, elevation or floor plan graphics
- Third party hardware and software Integration
- Extensive alarm configuration and implementation
- Custom data logging and data retrieval.
- Siemens or others plant factory witness testing
- On-site and remote hands-on system training
- Overall PMC project management

#### Application Engineers Capabilities:

- Communication network topology approval drawings
- Project management plan for the PMC system
- Interface to Siemens APOGEE building management system
- Power monitoring workstations and server configuration
- Final as-built operation and maintenance manuals
- Integrate with Siemens medium voltage, low voltage Switchgear & motor control centers
- Integration with Siemens Industrial Automation components & Software WinCC / PCS 7
- System communication troubleshooting
- Site Acceptance Test procedure (SAT), Method of Procedures (MOP), Factory Acceptance Test Procedure (FAT)
- On-site startup & commissioning

#### Reliable Power Quality

Whether you are designing a fault tolerant mission critical infrastructure or you want to intelligently balance workloads to optimize energy usage and control costs, you need a reliable and industry proven monitoring solution. You will gain a visible look into the actual power consumption to understand the average and peak power utilization, monitor and manage UPS's and power distribution units, or even a complete IT support infrastructure, including generators, environmental systems and detection devices, as well as other components from multiple vendors. A Siemens designed solution using WinPM.Net or Powermanager, coupled with high quality Siemens meters will result in a powerful tool, helping to analyze, identify and correct power issues before they become critical. Instant notification by email or alarm when power quality issues such as sag/swell or voltage disturbance occur.

#### Flexible

Easily integrate with any vendor's equipment using standard communication protocols to combine critical alerts and realtime data. Monitor and manage critical power devices from a single uninterruptible power system (UPS), an enterprise-wide network of many UPS's and power distribution devices, or a complete IT support infrastructure, including generators, environmental systems and detection devices, and other components from multiple vendors.

#### Informative

Siemens Power Distribution and Solutions provide an energy monitoring solution that can provide you with the reports and the data you need for your operation. Complete power analysis from the incoming utility power to individual branch circuits.

# Power Distribution Solutions

## Services



### Advantages to You...

- Technical experts
- Single source supplier
- Available 24/7, 365 days a year
- Reduced total cost of ownership (TCO)
- Avoid unscheduled downtime with preventive maintenance

### SIEPRO Service Products

Modular SIEPRO service products enable you to customize a technical service agreement to meet your organization's maintenance needs over the entire life cycle of your installation. Including SIEPRO products in your TSA will provide the following benefits:

- Substantial savings versus "on demand" purchases
- Optimized scaling of your maintenance organization
- Assurance that your installation is operating at maximum performance and availability

#### Telephone and Internet

Priority support

When you need help right now, choose the support coverage that fits your business:

- 24 hours x 7 days a week
- 8 hours x 5 days a week

#### Extended support

With extended support, you can request blocks of support hours for specific projects and tasks. We can customize this support service to meet your individual needs.

#### Remote service

Remote service provides support and diagnostics via data line to save you time and money. Technical support specialists directly access your system for real-time troubleshooting to provide maximum uptime.

#### Technical account liaison

A technical account liaison provides consulting and guidance on all aspects of support through familiarity with the application, your business goals and processes, and your maintenance and engineering staff.

In addition to a site visit to assess your installation and support requirements, the technical account liaison will conduct monthly reviews with your staff to ensure you are receiving maximum payback on your investment.

#### Field services

Block of hours

Purchase field service hours in 40 hour increments for preventative, predictive or emergency services.

#### Embedded engineer

Full-time, on-site support from a certified Siemens professional.

#### Emergency support

Purchase emergency service hours in 40 hour increments to ensure the fastest possible response time.

#### Maintenance programs

Packaged maintenance programs available for:

- System performance checks
- Run diagnostics
- Analyze power quality
- Visual inspections of key system components
- Database trim and backup

#### Training

Operation and maintenance Siemens training offers a broad range of educational services, providing quality and excellence to the automation industry. Targeted product and system training provides the student with practical, hands-on experience.

#### Customized on-site training

On-site training is excellent for large groups or when individual, one-on-one instruction is needed. When the trainer visits your facility, product training will be conducted on your specific installation. Classroom lectures, and trouble-shooting techniques specific to your installation are covered in detail during the training session.

#### Software update service

The software update service enables you to take advantage of enhancements to the most current software versions. A site evaluation is conducted to determine necessary upgrade requirements prior to the Software Update Service.