

Power Mod™



Siemens is proud to introduce Power Mod™ with QuickSystem™ - a new robust and feature-rich line of modular metering designed with the contractor in mind. Power Mod features a unique combination of labor saving features to aid the contractor while installing the product. QuickSystem encompasses every step of installation of the product - from mounting the product on the wall to plugging in the tenant circuit breaker - these five key features were specifically engineered to decrease installation time. Power Mod offers a wide range of products to meet applications for virtually every need.

From our new underground only mains for EUSERC applications to our exclusive six high 225 Amp Residential Meter Stack - Siemens can meet your multi family metering needs. Quality and service are keystones of the Power Mod line. Siemens Power Mod has been tested to all applicable UL and ANSI standards as well as Siemens' own rigorous internal specifications. Every module offers 1200 Amp thru-bussing as a standard feature. Every meter stack offers fully rated vertical bussing. All of this delivered at a competitive time and price to other, lower rated products.

Introduction

www.sea.siemens.com/powermod

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Power Mod

QuickSystem™ Features

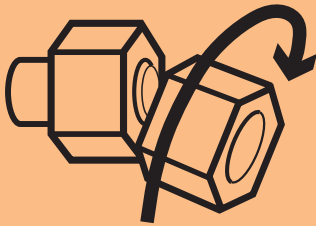
Contractor-focused features, robust quality, dependable service, and exclusive products define Siemens Power Mod. The new standard in multi family metering. QuickSystem showcases the key strengths of Power Mod through five labor saving features:



QuickConnect™

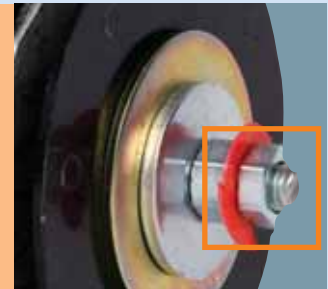
A Siemens exclusive feature, QuickConnect reduces bussing connections from many to one - ensuring a single reliable connection instead of multiple connections.

Siemens exclusive feature



QuickTorque™

Eliminates the need for time consuming torque readings, this breakaway nut provides the correct indication of torque of the QuickConnect. When tightened, the outer head twists off at the proper torque for connection, leaving a single nut for future maintenance.



QuickBolt™

A Siemens exclusive feature, QuickBolt eliminates the requirement to line up mechanical connections - instead bolts remain retracted until the openings line up- allowing the bolts to protrude through automatically. Springs push the bolts through and provide positive pressure to keep bolts in place while wingnuts are attached and tightened.

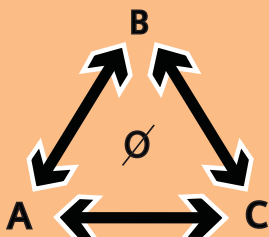
Siemens exclusive feature



QuickRoll™

A Siemens exclusive feature, QuickRoll eliminates the typical metal brackets for mounting modules to the wall. Instead of metal scraping metal, QuickRoll allows the module to glide down the mounting rail via a durable nylon wheel inside a mounting bracket.

Siemens exclusive feature



QuickPhase™

Each individual meter position can be phased independently according to the users needs. QuickPhase allows the user the ultimate flexibility to adjust to each individual application.



Power Mod

Product Information

Siemens Modular Metering includes an assortment of module types that can be configured to meet a wide range of residential and commercial group metering applications.

Siemens modular metering provides for single phase, three wire, 120/240V AC; three phase, four wire 120/208Y applications, and three phase in/out, 240 Volt max delta systems. The cross bus that connects devices is aluminum and has a 1200 Amp continuous current rating.

A typical application requires a main device module and one or more residential or commercial meter stacks. Depending on the application additional modules such as pullbox, tap box, or a spacer may be required.



QuickConnect™

The time-saving QuickConnect™ (QC) provides a single connection for phase, neutral, and ground – all tightened by a single nut that is externally accessible. Beveled edges on the QC allow for easy positioning of the joint. Factory installed QuickBolt™ spring loaded bolts are located just above and below the QC opening to compress the surrounding gaskets together to form a water-tight seal. For extra stability additional nuts and bolts above and below QuickBolts are included as a means of physically joining the meter stacks together both above and below the QC opening.



Bus Construction

Unmetered bus is surrounded by a barrier and all inaccessible bus connections are welded for maximum strength. All other connections- QuickConnect™ and meter socket connections, are bolted and accessible.



Neutral & Ground Provisions

WMM Module Neutral & Ground Provisions are located on the bottom end of the meter modules. All grounds and neutrals may be relocated to the top of the enclosure if a top-exit is needed. Each meter module has halfshears to help locate a field-cut knockout if a top exit is preferred.



Tenant Breaker Provisions

Each 225 Amp meter socket has a provision for a 2-pole 225A max plug-in type QS circuit breaker. The compact QS breaker fits in two inches and reduces enclosure size limited total mounting space required. Single right hand bend wiring saves time and wire. Insert a 125A QP into a 225 Amp QS slot without conversion kits or filler plates. Generous gutter space allows for wiring for top, bottom, or back of the meter module. Each meter cover is embossed to provide a location for the unit (apartment) number.



WMM Module factory phasing is as follows:

- 2 Gang: AB, BC
- 3 Gang: AB, BC, CA
- 4 Gang: AB, BC, CA, AB
- 5 Gang: AB, BC, CA, AB, BC
- 6 Gang: AB, BC, CA, AB, BC, CA

Any position can be adjusted to any phase.



Power Mod

Features

Siemens Power Mod offers a wide array of modules to meet the needs of almost any 240V application. Modules are grouped and categorized by function and type to facilitate the selection and ordering process. The basic modules are:

A photograph showing the interior of a Siemens Power Mod breaker module, featuring a large circuit breaker and terminal blocks.	<p>Standard Breaker Modules (type WB)</p> <p>These modules are designed for line and load side applications ranging from 200 to 2000 Amps at 240V AC Max. For 1200 Amp and below modules compression lug landing pads can be field installed and devices are rated for overhead and underground feed. 1600-2000 Amp models feature dedicated feed to minimize width and come with factory installed studs to which mechanical or compression lugs can be installed. A wide variety of lug options for AL and CU wire are available to help minimize cost and customize the module to your specifications. All modules in this family feature the four most basic QuickSystem features: QuickConnect, QuickBolt, QuickRoll, and QuickTorque.</p>
A photograph of a Siemens Power Mod breaker-pullbox combination module, showing the internal components and a pull section for grounding.	<p>EUSERC-Compliant Breaker-Pullbox Combination Modules (type WEB)</p> <p>These modules are designed for 240V AC Max line side, bottom feed applications, up to 1200 Amps, in those areas that subscribe to the EUSERC standard, require compression lugs, or require separate compartments for the breaker and line side terminals. NEMA II stud pattern bolts are standard on every unit enabling compression or mechanical lug use. Each module features a removable ground trough to facilitate pulling the grounding conductor through the pull section. Multiple ground lugs are included with every device. All modules in this family feature the four most basic QuickSystem features: QuickConnect, QuickBolt, QuickRoll, and QuickTorque.</p>
A photograph of a Siemens Power Mod switch module with its door open, showing internal switches and terminal blocks.	<p>Standard Switch Modules (type WS)</p> <p>Switch modules are designed for line and load side applications ranging from 400 to 1200 Amps at 240V AC Max. For modules at 800 Amps and below NEMA II stud pattern bolts are factory installed enabling a wide variety of compression and mechanical lug options. 400-800 Amp modules feature the exclusive invertibility feature - allowing the user to simply rotate the enclosure to accommodate top or bottom feed. A wide variety of lug options for AL and CU wire are available to help minimize cost and customize the module to your specifications. All modules in this family feature the four most basic QuickSystem features: QuickConnect, QuickBolt, QuickRoll, and QuickTorque. Class T fuse provisions are standard.</p>
A photograph of a Siemens Power Mod switch-pullbox combination module, showing the internal switch and pull section.	<p>EUSERC-Compliant Switch-Pullbox Combination Modules (type WES)</p> <p>These modules are designed for 240V AC max line side, bottom feed applications, up to 1200 Amps, in those areas that subscribe to the EUSERC standard or, require compression lugs. NEMA II stud pattern bolts are standard on every unit enabling compression or mechanical lug use. Each module features a removable ground trough to facilitate pulling the grounding conductor through the pull section. Multiple ground lugs are included with every device. All modules in this family feature the four most basic QuickSystem features: QuickConnect, QuickBolt, QuickRoll, and QuickTorque. Class T fuse provisions are standard.</p>
A photograph of a Siemens Power Mod tap box module, showing the internal terminal blocks and wiring.	<p>Standard Tap Box Modules (type WTB)</p> <p>Tap box modules are designed for line side main lug only or load side remote feed applications ranging from 400-1600 Amps at 240V AC. NEMA II stud pattern bolts are factory installed enabling a wide variety of compression and mechanical lug options. All modules in this family feature the exclusive invertibility feature - allowing the user to simply rotate the enclosure to accommodate top or bottom feed. A wide variety of lug options for AL and CU wire are available to help minimize cost and customize the module to your specifications. All modules in this family feature the four most basic QuickSystem features: QuickConnect, QuickBolt, QuickRoll, and QuickTorque.</p>

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Features

	<p>EUSERC-Compliant Tapbox-Pullbox Combination Modules (type WET) These modules are designed for main lug only 240V AC Max line side, bottom feed applications, up to 1200 Amps, in those areas that subscribe to the EUSERC standard, require compression lugs, or require more wire bend space than a standard tap box. NEMA II stud pattern bolts are standard on every unit enabling compression or mechanical lug use. All modules in this family feature the four most basic QuickSystem features: QuickConnect, QuickBolt, QuickRoll, and QuickTorque.</p>
	<p>Residential Meter Stacks (type WMM) Residential stack modules are available in 125 Amp and 225 Amp per position modules. Two through six position devices in 125 and 225 Amp are available in ring, ringless with and without horn bypass. Modules with three phase through bus have the QuickPhase feature which enables field phasing per position allowing the user to customize the stack to their specific needs. 225 Amp modules use the new QS type breaker which eliminates multiple bends in tenant service conductors and allows for 125 Amp conversion without the need for costly and labor intensive conversion kits. All modules in this family feature the complete QuickSystem feature set: QuickConnect, QuickBolt, QuickRoll, QuickPhase and QuickTorque.</p>
	<p>Commercial Meter Stacks with Lever Bypass (type WML) Lever bypass commercial meter stacks are available with 240V AC max single and three phase tenant main provisions. This family offers 100 Amp with three phase tenant mains with up to four positions, 225 Amp with single and three phase tenant mains with up to four positions, and 320 Amp with single and three phase tenant mains up to two positions. Commercial type WML stacks use the Landis & Gyr type HQ lever bypass which has led the industry for forty years in quality and performance. Stacks with single phase 225 Amp provisions can be converted to 125 Amp without the need for costly and labor intensive conversion kits. All modules in this family feature the four basic QuickSystem features: QuickConnect, QuickBolt, QuickRoll, and QuickTorque.</p>
	<p>EUSERC Compliant Commercial Meter Stacks with Test Block Bypass (type WMT) Test block bypass commercial meter stacks are EUSERC compliant and are available with single phase and three phase output tenant main provisions. This family offers 225 Amp tenant mains with single and three out put with up to three positions. Stacks with single phase 225 Amp provisions can be converted to 125 Amp without the need for costly and labor intensive conversion kits. All modules in this family feature the fourbasic QuickSystem features: QuickConnect, QuickBolt, QuickRoll, and QuickTorque.</p>
	<p>Commercial Meter Stacks with K Base Meter Sockets (type WMK) K-Base is a bolt in meter socket designed and provided exclusively by Landis & Gyr. Utility acceptance varies so please check for approval prior to using one of these devices. K-Base commercial meter stacks are available with 240V AC max single and three phase tenant main provisions. Single phase in and out devices utilize the K4 meter socket. Three phase in and single phase out devices use the K5 meter socket and three phase in with three phase out utilize the K7 meter socket. All devices are offered in one position 400 and 600 Amp configurations. The K7 modules are offered with two positions at 400 Amps per position. All modules in this family feature the four basic QuickSystem features: QuickConnect, QuickBolt, QuickRoll, and QuickTorque.</p>
	<p>Accessories The Power Mod family offers a wide variety of accessories to customize the products to your particular application. This family includes:</p> <ul style="list-style-type: none">■ Spacers: used to put distance between a main and stack where required or just to extend the length of the lineup■ Elbows: NEMA 1 rated devices designed to turn a lineup around an inside corner■ Pullboxes: EUSERC compliant underground pull section for use with standard breaker and switch units■ Lugs: the widest array of lug options in the industry focusing on offering the most economical solution for your application■ Misc: field installable 5th jaw kits, hubs, replacement parts

Power Mod configuration

Configuration Tips

The service feed for a Modular Metering configuration can be on the end of the configuration or in the middle.

Here are a few configuration issues to keep in mind.

- Configurations are limited by the continuous current ratings for the main device and the cross bus. All cross buses are aluminum with 1200 Amp continuous current rating. For center fed applications, the total current in the main device may exceed 1200 Amps if the main device is rated accordingly, but the cross bus current on either side of the main device cannot exceed 1200 Amps.
- Pullboxes have provisions for field installed lugs for incoming and outgoing conductors. These modules should be used for underground service feeds when inspecting authorities require the service to be split. Pullboxes do not have horizontal cross bus. If a connection to cross bus is needed a tap box (type WTB, WET) should be used.
- 200 to 1200 Amp standard breaker modules accept combination feed allowing service conductors to enter the top or bottom of the enclosure. 1600 to 2000 Amp standard breaker modules have dedicated top or bottom feed. 400 to 800 Amp switch modules are invertible for top or bottom feed. 1200 Amp switches are bottom feed only. All standard tapboxes are invertible for top or bottom feed. Invertible units come with two sets of two QuickBolts™ on both sides of the unit. The QuickBolts on the left side must be removed by taking off two mounting screws on each QuickBolt assembly.
- A spacer is commonly required between a meter stack and the main disconnect module (or tapbox) for a EUSERC installation. A spacer can also be used to extend the length of the lineup when needed.
- All meter stack horizontal bussing must match the output (three phase or single phase) of the main disconnect module.
- Each meter stack comes with a QuickConnect™ and a mounting rail. A QuickConnect is needed for each cross bus connection.
- Utilities have varying requirements for equipment height, cover types, and bypass types. Therefore, utility acceptance should be obtained prior to installation of any modules.
- Order a circuit breaker tenant main for each meter position.
- Circuit breakers must be single phase or three phase to match the output of the meter stack. Refer to the Siemens Speedfax catalog for circuit breaker series rating information.
- Standard tapboxes and circuit breakers (type WTB, WB) may be used as a service entrance module or a load side feed for remote equipment. An additional QuickConnect must be ordered when using these devices on the load side to feed remote equipment.
- Tapboxes provide a direct connection to the cross bus and do not provide any overcurrent protection. Tapboxes should never be used to feed other main devices (WS, WB, WES, WEB) as this would bypass the overcurrent protection.

Power Mod configuration

Examples

Configuration Examples: The following illustration shows a few configuration examples. Other configurations are also possible. For simplicity, only one or two meter stacks are shown for each configuration, but additional meter stacks can be added as long as the cross bus and main device specifications are not exceeded.

