

SIEMENS
Ingenuity for life



Power monitoring made simple

Easy, reliable, cost-efficient

[siemens.com/powermonitoring](https://www.siemens.com/powermonitoring)

Thailand

Edition
2022

Hardware component

Industry



	7KM PAC2200	7KM PAC3200T	7KM PAC3120 new	7KM PAC3220 new
Installation type				
Front mounting Standard mounting rail screw mounting	- ■ -	- ■ -	■ - -	■ - -
Withdrawable Fixed-mounted	- -	- -	- -	- -
Measuring connection				
Direct measurement	■	-	-	-
Transformer measurement	■	■	■	■
Multichannel measuring system	-	-	-	-
Suitable transformers				
Window-type current transformers	■	■	■	■
Folding transformer	■	■	■	■
Integrated transformer	-	-	-	-
Commissioning				
MID version	■	-	-	-
Max. input voltage L-L/L-N	480 V/277 V	480 V/277 V	690 V/400 V	690 V/400 V
Transformer connection version	x/1 A or x/5 A	x/1 A or x/5 A	x/1 A or x/5 A	x/1 A or x/5 A
Direct connection version	65 A	-	-	-
DC power supply unit with extra-low voltage version	-	-	22 ... 65 V DC	22 ... 65 V DC
Single-phase counter version	■	-	-	-
Electrically isolated voltage inputs	-	-	-	-
Version without display (for web interface)	-	■	-	-
Evaluation				
Measured quantities				
Average value of measured values	■	■	■	■
Voltage, current, frequency	■	■	■	■
Power, power factor	■	■	■	■
Energy measurement				
Daily energy storage	60 days	60 days	60 days	60 days
Apparent Active Reactive energy cos φ	■ ■ ■ -	■ ■ ■ -	■ ■ ■ -	■ ■ ■ -
Distortion factor THD (voltage, current)	-	■	■	■
Harmonics (voltage, current)	-	-	-	-
Phase angle/phase chart	-	-	-	-
Load profile recording	-	-	-	-
Flicker acc. to IEC 61000-4-15	-	-	-	-
Monitoring functions				
Operating hours counter	■	■	■	■
Limit monitoring	-	■	■	■
Logic functions	-	■	■	■
Event log	-	-	-	-
Gateway function	-	-	-	-
Reporting acc. to EN 50160	-	-	-	-
Integrated fault recorder	-	-	-	-
Integrated communication interfaces				
Digital inputs/digital outputs	1/1	1/1	2/2	2/2
S0-Interface	■	■	■	■
M-Bus	■	-	-	-
RS485 (Modbus RTU)	■	-	■	-
Ethernet with Modbus TCP	■	■	-	■
BACnet	-	-	-	-
More information				
Catalog LV 10	See page 10/18	See page 10/18	See page 10/18	See page 10/18

¹⁾ For devices with AC/DC wide-voltage power supply unit

Industry

Buildings and infrastructure



**7KM
PAC4200**

**7KM
PAC5100**

**7KM
PAC5200**

**7KT
PAC1200**

**7KT
PAC1600**

SEM3

■ - -	■ ■ -	■ ■ -	- ■ -	- ■ -	- -■
- -	- -	- -	- -	- -	- -
-	-	-	■	■	-
■	■	■	■	■	-
-	-	-	■	-	■
■	■	■	■	■	■
■	■	■	■	■	■
-	-	-	■	-	■
690 V/400 V ¹⁾ x/1 A or x/5 A	690 V/400 V x/1 A or x/5 A	690 V/400 V x/1 A or x/5 A	400 V/230 V x/5 A	400 V/230 V x/5 A	480 V/277 V 50 ... 1200 A/0.1 A
-	-	-	40/63 A	63/80 A	-
22 ... 65 V DC	-	-	-	-	-
-	-	-	■	■	■
-	■	■	-	-	-
-	■	■	■	-	■
■	-	-	-	-	-
■	■	■	■	■	■
■	■	■	■	■	■
-	-	-	-	-	-
■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	- ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■
■	■	■	-	-	-
2nd to 64th	2nd to 40th	2nd to 40th	-	-	-
■	■	■	-	-	-
■	-	■	-	-	■
-	-	■	-	-	-
■	-	-	-	■	-
■	■	■	-	■	-
> 4000 events	■	■	-	-	■
■	-	-	-	-	-
-	-	■	-	-	-
-	-	■	-	-	-
2/2	0/2	0/2	-	1/1	2/1
■	-	-	-	■	-
-	-	-	-	■	-
-	-	-	-	■	■
■	■	■	■	-	■
-	-	-	-	-	■

See page 10/18

See page 10/18

See page 10/18

See page 10/18

See page 10/18

See page 10/18

7KT PAC1020 (Modbus RTU) new



I,V,P,PF,f, Apparent ,Active-Reactive energy

Power supply input: 85V – 276Vac
Transformer connection version /1A, /5 A
Digital 1 inputs 1 outputs
Active energy and active power: Accuracy 1%

Model	Ordercode	THB (ທຸກ)
PAC 1020	7KM1020-0BA01-1DA0	8,300

7KT PAC1600 (Modbus RTU)



I,V,P,PF,f, Apparent ,Active-Reactive energy
Operating hours counter

Max. input voltage L-L / L-N 400 V / 230 V
Transformer connection version /1A, /5 A
Digital 1 inputs 1 outputs
DIN Rail mount
Accuracy Class 1 for 1phase/0.5s for 3phase

7KM PAC2200



I,V,P,PF,f, Apparent ,Active-Reactive energy
Operating hours counter
Average value of measured values

Max. input voltage L-L / L-N 480 V / 277 V
Transformer connection version /1A, /5 A
Digital 1 inputs 1 outputs
DIN Rail mount
Active energy and power Accuracy 0.5% IEC 61557-12

Interface	Ordercode	THB (ທຸກ)
Direct 1phase (63A)	7KT1651	11,550
Direct 3phase (80A)	7KT1665	14,850
Indirect 3phase	7KT1661	13,750

Interface	Measurement	Ordercode	THB (ທຸກ)
Modbus RTU	Direct (65A)	7KM2200-2EA40-1DA1	13,500
	Indirect	7KM2200-2EA30-1DA1	
Modbus TCP	Direct (65A)	7KM2200-2EA40-1EA1	15,400
	Indirect	7KM2200-2EA30-1EA1	

Mbus, MID version ,please contact Siemens

Mbus,MID version ,please contact Siemens

7KM PAC 3120 (Modbus RTU)



I,V,P,PF,f, Apparent ,Active-Reactive energy
Operating hours counter
Average value of measured values
Distortion factor THD (voltage, current)

Power supply input: 95V – 240Vac /110-340 V DC (±10 %)
Max. input voltage L-L / L-N 690 V / 400 V
Transformer connection version /1A, /5 A
Digital 2 inputs 2 outputs
Active energy and power Accuracy 0.5% IEC 61557-12

7KM PAC 3220 (Modbus TCP)



I,V,P,PF,f, Apparent ,Active-Reactive energy
Operating hours counter
Average value of measured values
Distortion factor THD (voltage, current)
Inbuilt Webserver, Double communication port

Power supply input: 95V – 240Vac /110-340 V DC (±10 %)
Max. input voltage L-L / L-N 690 V / 400 V
Transformer connection version /1A, /5 A
Digital 2 inputs 2 outputs
Active energy and power Accuracy 0.5% IEC 61557-12

Model	Ordercode	THB (ທຸກ)
PAC 3120	7KM3120-0BA01-1DA0	18,150

Model	Ordercode	THB (ທຸກ)
PAC 3220	7KM3220-0BA01-1DA0	35,200

Other power supply range in available contact Siemens

Other power supply range in available contact Siemens

7KM PAC 4200 (Modbus TCP)



Operating hours counter ,Cos Φ
Harmonics (voltage, current) 64th
Phase angle/phase chart Event log
Load profile recording
Gateway function, Inbuilt Webserver

Power supply input: 95V – 240Vac /110-340 V DC (±10 %)
Max. input voltage L-L / L-N 690 V / 400 V (AC/DC)
Transformer connection version /1A, /5 A
Digital 2 inputs 2 outputs
Active energy and power Accuracy 0.2s

Expansion and communication modules

PAC3220 and PAC 4200



Model	Ordercode	THB (ທຸກ)
PAC 4200	7KM4212-0BA00-3AA0	55,000

Modules	Ordercode	THB (ທຸກ)
PROFIBUS DP Modules	7KM9300-0AB01-0AA0	9,900
RS485 Modules	7KM9300-0AM00-0AA0	6,600
4DI / 2DO expansion	7KM9200-0AB00-0AA0	8,800
I(N), I(Diff), analog expansion	7KM9200-0AD00-0AA0	12,100
Ethernet PROFINET Modules	7KM9300-0AE02-0AA0	16,500

Other power supply range in available contact Siemens

7KM PAC 5100 (Modbus TCP)



Operating hours counter ,Cos Φ
 Harmonics (voltage, current) 40th
 Phase angle/phase chart ,Event log
 Inbuilt Webserver

Max. input voltage L-L / L-N 690 V / 400 V
 Transformer connection version /1A, /5 A
 Electrically isolated voltage inputs
 Digital 2 outputs
 Active energy and power Accuracy 0.5% IEC 61557-12

Model	Ordercode	THB (บาท)
PAC 5100	7KM5212-6BA00-1EA2	Call

7KM PAC 5200 (Modbus TCP)



Operating hours counter ,Cos Φ
 Harmonics (voltage, current) 40th
 Phase angle/phase chart ,Event log
 Inbuilt Webserver

Power Quality measurement IEC 61000-4-30
 Load profile recording , Memory 2GB
 Reporting EN 50160 and Integrated fault recorder

Max. input voltage L-L / L-N 690 V / 400 V
 Transformer connection version /1A, /5 A
 Electrically isolated voltage inputs
 Digital 2 outputs
 Active energy and power Accuracy 0.5% IEC 61557-12

Model	Ordercode	THB (บาท)
PAC 5200	7KM5412-6BA00-1EA2	Call

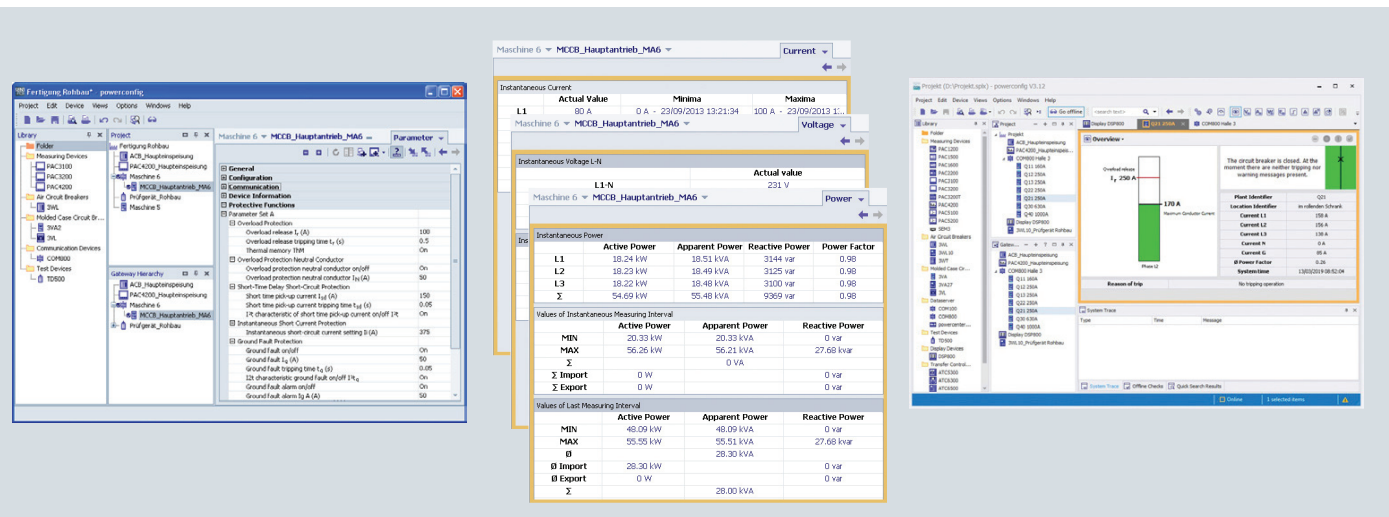
Powermanager V4 new

PC-based power monitoring software

SENTRON powermanager V4.1

based on a new platform with advanced graphical capabilities and a standard SQL database. The workflows for setting up the system, creating devices, graphically displaying the device data and processing it in reports have been fundamentally revised.

Version	Description	Article No.
powermanager V4.1		
Extended Package	Full product license for up to 10 devices, installation for client/server, web access	7KN2710-2CE40-0YCO
Trial license	powermanager V4.1 Full product license limited to 60 days for 10 devices, incl. "Graphics Editor" option pack free at https://support.industry.siemens.com	
Device expansions		
Device Pack (20)	Device expansion license for up to 20 devices	7KN2711-1CE40-0YCO
Device Pack (50)	Device expansion license for up to 50 devices	7KN2711-2CE40-0YCO
Device Pack (100)	Device expansion license for up to 100 devices	7KN2711-3CE40-0YCO
Device Pack (200)	Device expansion license for up to 200 devices	7KN2711-4CE40-0YCO
Device Pack (500)	Device expansion license for up to 500 devices	7KN2711-5CE40-0YCO
Device Pack (1000)	Device expansion license for up to 1000 devices	7KN2711-6CE40-0YCO
Option packs		
"Graphics Editor" option pack	Option for creating/presenting any number of freely configured images	7KN2712-0CE40-0YCO
"Client (2)" option pack	Expansion for up to 2 clients	7KN2712-1CE40-0YCO
"Client (5)" option pack	Expansion for up to 5 clients	7KN2712-2CE40-0YCO
"OPC UA/DA Server" option pack	Option for using OPC UA/DA Server	7KN2712-3CE40-0YCO
"powermanager Server" option pack	Additionally, powermanager server license for distributed systems without devices, web, etc.	7KN2712-4CE40-0YCO



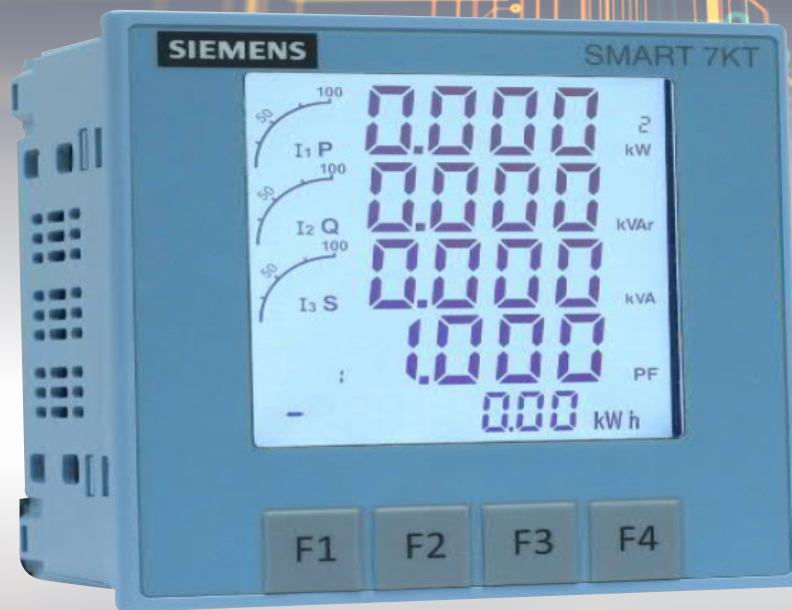
Setting of parameter values

Display of actual measured quantities

Display of the circuit breaker state

SIEMENS

Ingenuity for life



SMART 7KT Multi Function Meter

Smart metering solution for
all your load feeders

With the increasing awareness of Energy conservation, more and more electrical installations, be it industrial, residential or commercial buildings, require precise and reliable energy monitoring.

Multifunction Meters have evolved from simple measuring devices to a critical component of Energy Management Systems.

The SMART 7KT Multifunction Meter is the latest addition to the wide portfolio of Measuring Devices and Energy Management Software from Siemens.

SMART 7KT (Modbus RTU)



Graphical LCD Screen
 Suitable for standard 96*96 panel mounting
 Accuracy Class1 for Active Energy as per IEC62053-21
 Total Harmonics Distortion- %THD- Voltage & Current
 1 DI- Digital Input for Status monitoring
 CT Secondary- 1A or 5A
 ON Hours Counter

Interface	Ordercode	THB (บาท)
Modbus RTU	7KT0310	8,200

General Features

MLFB	7KT0310
Mounting Type	Panel
Terminal	Screw Type
Dimension	96 x 96 x 50 mm
IP Protection	IP65 On Front When Installed
Display Type	LCD with Bar Graph display
Temperature	-20° to +60° C
Humidity	0% to 95% without moisture consideration
Password Protection	Yes

Measuring Range

Nominal Current	3 x 0 - 5 A with max. 20% Overload
CT Primary	1 A - 10000 A
CT Secondary	Selectable - 1 A or 5 A
Input Voltage L-L/L-N	480 V / 276 V
Rated Frequency	50/60 Hz
Network	1P2W, 3P3W, 3P4W

Control Supply

Input voltage range	95 - 240 V AC ± 10%
Consumption	8 VA max
Frequency	45 - 65 Hz

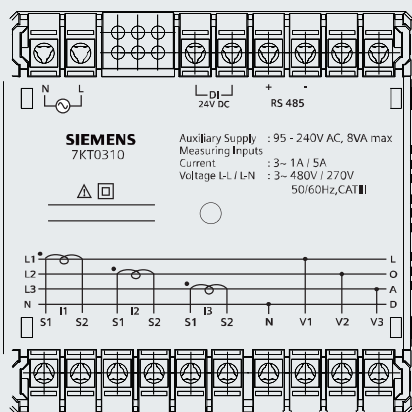
Display Parameters & Range :

Voltage (Phase and Average)	Yes
Current (L1, L2, L3)	Yes
Frequency	Yes
Neutral Current (Instantaneous on Display)	Yes
% THD - I/V	Yes
Power (Active / Reactive / Apparent)	Yes
Min / Max Values of Power	Yes
Power Factor (Phase wise & Average)	-1.00 to + 1.00
Phase Angle	Yes
Energy (Active, Reactive, Apparent)	Yes (Instantaneous, Class 1)
Maximum Demand	Yes
ON Hour Counter	Yes
Pollution Degree	II
Overvoltage Category	III

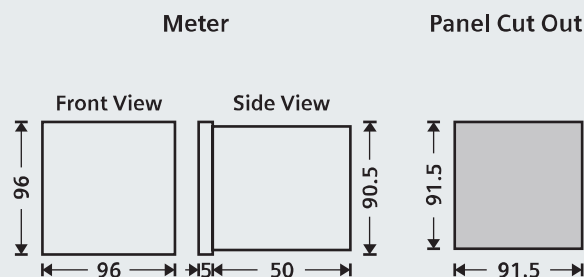
System Communication

Communication Interface	RS 485 Interface, Modbus RTU Protocol
Digital Input (DI) / Digital Output (DO)	1 DI

Terminal Connection



Dimensions (in mm)





บริษัท ซีเมนส์ จำกัด

อาคารชาภูมิสสระทาวเวอร์ 2 ชั้น 32

ถนนเพชรบุรีตัดใหม่ แขวงบางกะปิ

เขตห้วยขวาง กรุงเทพมหานคร 10310 ประเทศไทย

โทร +66 2715 4000



Email : electricalproducts.th@siemens.com

Website : www.siemens.co.th

The information provided in this catalog contains merely general descriptions or characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract. Availability and technical specifications are subject to change without notice.

All product designations may be trademarks or product names of Siemens AG or supplier companies whose use by third parties for their own purposes could violate the rights of the owners.

สอบถามและสั่งซื้อผลิตภัณฑ์ ติดต่อร้านค้าหรือตัวแทนจำหน่าย