

►► Intelligent PDU's

Intelligent Power Distribution Units
for Data Centers

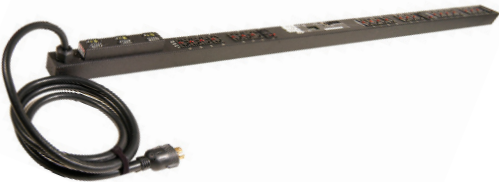
Intelligent Power Distribution Units

Siemon’s line of intelligent PDUs provide valuable energy consumption data while reliably delivering power to critical IT equipment. Each of our PDU families deliver real-time power information with varying degrees of intelligent functionality ranging from basic Metered units to full-featured Managed PDUs - providing multiple options based on the level of data and control requirements. Siemon’s intelligent PDUs may be used as stand-alone units, or they can communicate with third-party software through common open networking protocols.

All of our network-capable intelligent PDUs also have the capacity to connect environmental sensors, allowing temperature, airflow, and humidity to be measured to further troubleshoot and optimize data center efficiency.

PDU Families

- Metered
- Monitored
- Smart
- Switched
- Managed

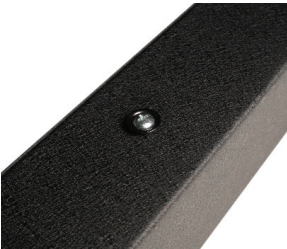


FUNCTION	METERED	MONITORED	SMART	SWITCHED	MANAGED
Built-In Display for Local Use	√	√	√	√	√
Remote Monitoring via Ethernet Port		√	√	√	√
Device-Level Monitoring	√	√	√	√	√
Outlet-Level Monitoring			√		√
Outlet-Level Switching/Control				√	√
Environmental Sensor Ports		√	√	√	√



Configurations

- NEMA and IEC plug inputs
- Single and 3-phase voltages
- Horizontal and zero-U vertical styles
- 3m (10 ft.) cords with other lengths available
- Test data included with each unit



Mounting

- Vertical PDUs mount via toolless button attachments and include a mounting bracket for additional flexibility
- Horizontal PDUs mount to standard EIA 19” configurations

BENEFITS OF INTELLIGENT PDUs

Reduce energy costs

- Identify high power consumption equipment by using logs and port monitoring
- Find opportunities for consolidation of underutilized equipment such as near-idle servers
- Use environmental monitoring to identify overcooling situations where temperatures could be increased for energy cost reduction

Manage and optimize power capacity

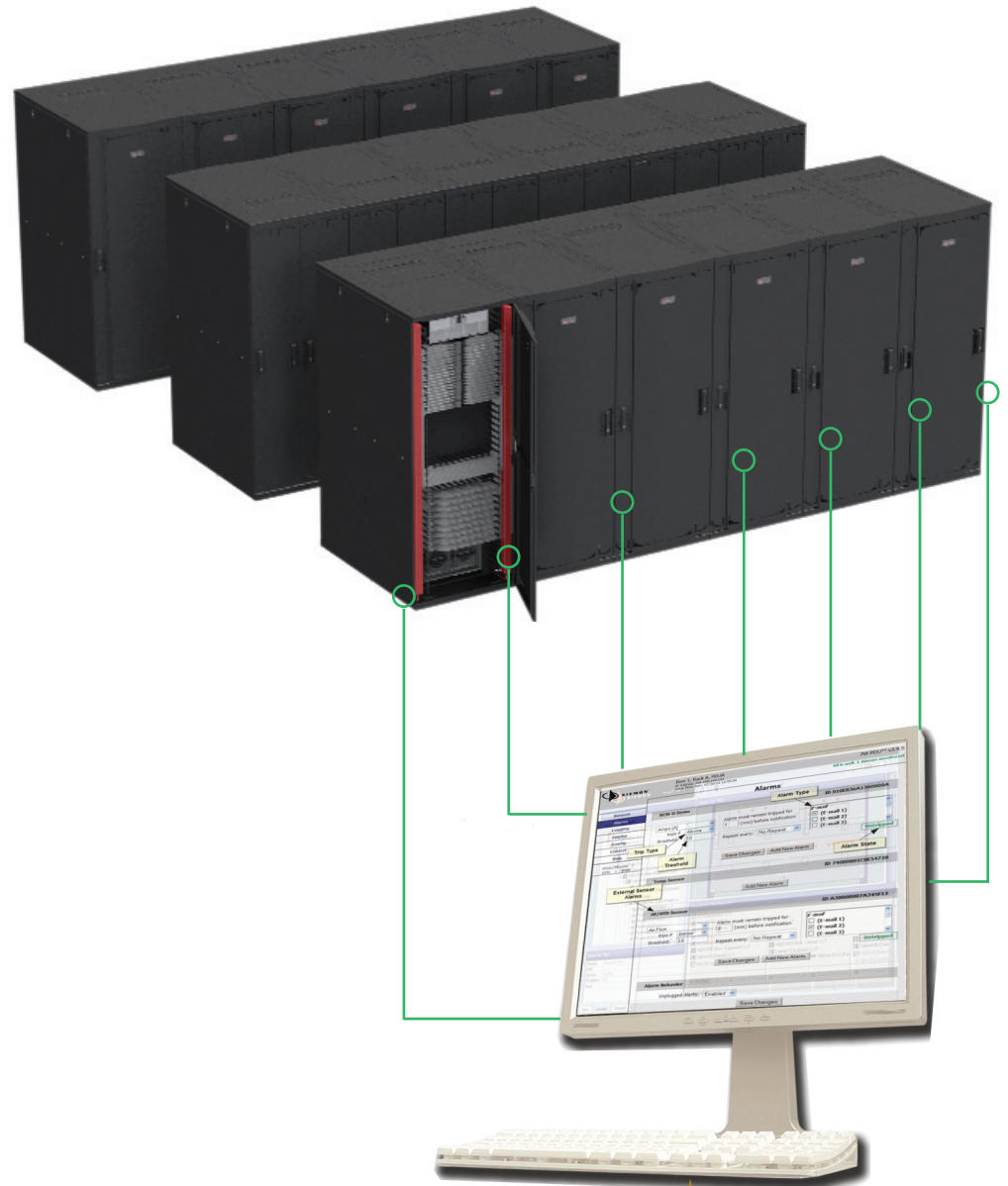
- Use real-time remote monitoring to understand usage vs. capacity and make informed decisions on equipment additions and data center changes
- Evaluate actual usage versus design assumptions (using equipment nameplate ratings) to understand true power needs which may help increase equipment densities

Spot and prevent potential problems to ensure uptime

- Use alarms to quickly identify problems and drive resolution sooner
- Set alarm thresholds to spot potential problems such as overloads that could lead to power loss and downtime
- Use logs to identify erratic power consumption
- Use environmental monitoring to evaluate planned vs. actual temperatures to identify areas with insufficient cooling

Efficiently control power functions and resolve problems quickly

- Use individual outlet control to remotely restart equipment or shut down specific units
- Use sequencing to safely start up or shut down equipment and avoid creating demand spikes



Monitored and Smart PDUs

Monitored and Smart PDUs enable remote monitoring of power consumption.

Monitored PDUs

Monitored PDUs collect data at an aggregate, device-level, generating a smaller quantity of information to simplify management.

Smart PDUs

Smart PDUs offer the highest level of monitoring by providing outlet-level data collection.

Ordering Information

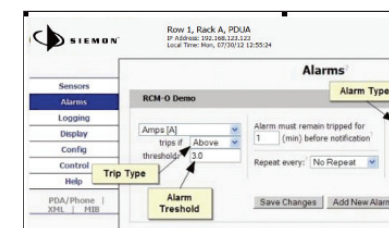
Type	Mounting	Input Current	Input Voltage	Power	Input Plug	Output Receptacles	Output Receptacles	Length	Part Number
North America									
Monitored	Vertical	20A	120	1.9kW	NEMA 5-20P	5-20R (24)	-	1683mm (66 in.)	7MV02-AB24Z-K1A
Monitored	Vertical	20A	120	1.9kW	NEMA L5-20P	5-20R (24)	-	1683mm (66 in.)	7MV05-AB24Z-K1A
Monitored	Vertical	20A	208	3.3kW	NEMA 6-20P	C-13 (24)	C-19 (6)	1683mm (66 in.)	7MV03-BA24E-K1A
Monitored	Vertical	20A	208	3.3kW	NEMA L6-20P	C-13 (24)	C-19 (6)	1683mm (66 in.)	7MV07-BA24E-K1A
Monitored	Vertical	20A, 3 phase	120 / 208 WYE	5.8kW	NEMA L21-20P	5-20R (24)	-	1683mm (66 in.)	7MV11-AB24Z-K1A
Monitored	Vertical	20A, 3 phase	120 / 208 WYE	5.8kW	NEMA L21-20P	C-13 (24)	C-19 (6)	1683mm (66 in.)	7MV11-BA24E-K1A
Monitored	Vertical	30A	120	2.9kW	NEMA L5-30P	5-20R (24)	-	1683mm (66 in.)	7MV06-AB24Z-K1A
Monitored	Vertical	30A	208	5kW	NEMA L6-30P	6-20R (24)	-	1683mm (66 in.)	7MV08-AC24Z-K1A
Monitored	Vertical	30A	208	5kW	NEMA L6-30P	C-13 (24)	C-19 (6)	1683mm (66 in.)	7MV08-BA24E-K1A
Monitored	Vertical	30A, 3 phase	120 / 208 WYE	8.6kW	NEMA L21-30P	5-20R (24)	-	1683mm (66 in.)	7MV13-AB24Z-K1A
Monitored	Vertical	30A, 3 phase	120 / 208 WYE	8.6kW	NEMA L21-30P	C-13 (24)	C-19 (6)	1683mm (66 in.)	7MV13-BA24E-K1A
Monitored	Vertical	35A, 3 phase	208 DELTA	10.1kW	IEC 3P / 4W	C-13 (30)	C-19 (6)	1778mm (70 in.)	7MV28-BA30E-K1A
Monitored	Vertical	50A, 3 phase	208 DELTA	14.4kW	IEC 3P / 4W	C-13 (24)	C-19 (6)	1829mm (72 in.)	7MV29-BA24E-K1A
Monitored	Vertical	60A, 3 phase	208 DELTA	17.3kW	IEC 3P / 4W	C-13 (24)	C-19 (6)	1829mm (72 in.)	7MV25-BA24E-K1A
Monitored	Horizontal 1U	20A	120 or 208	1.9 or 3.3kW	NEMA C-20	C-13 (12)	-	480mm (19 in.)	7MH19-BA12Z-K1A
Monitored	Horizontal 1U	20A	120	1.9kW	NEMA 5-20P	5-20R (10)	-	480mm (19 in.)	7MH02-AB10Z-K1A
Monitored	Horizontal 1U	20A	120	1.9kW	NEMA L5-20P	5-20R (10)	-	480mm (19 in.)	7MH05-AB10Z-K1A
Smart	Vertical	20A, 3 phase	120 / 208 WYE	5.7 kW	L21-20P	C-13 (18)	C-19 (6)	1683mm (66 in.)	7NV08-BA18E-K1A
Smart	Vertical	30A	208	4.9kW	L6-30P	C-13 (18)	C-19 (6)	1829mm (72 in.)	7NV08-BA18E-K1A
Smart	Vertical	30A, 3 phase	230 / 400 WYE	16.6kW	4P / 5W	C-13 (18)	C-19 (6)	1829mm (72 in.)	7NV34-BA18E-K1A
Smart	Vertical	30A, 3 phase	208 DELTA	8.6kW	L15-30P	C-13 (18)	C-19 (6)	1829mm (72 in.)	7NV15-BA18E-K1A
Smart	Vertical	30A, 3 phase	120 / 208 WYE	8.6kW	L21-30P	C-13 (18)	C-19 (6)	1829mm (72 in.)	7NV13-BA18E-K1A
International									
Monitored	Vertical	16A, 3 phase	230/400 WYE	11.04kW	IEC 309 3P + N + E	C-13 (24)	C-19 (6)	1683mm (66 in.)	7MV26-BA24E-K1A
Monitored	Vertical	16A	230	3.68kW	IEC 309 2P + E	C-13 (24)	C-19 (6)	1683mm (66 in.)	7MV20-BA24E-K1A
Monitored	Vertical	32A, 3 phase	230/400 WYE	22.08kW	IEC 309 3P + N + E	C-13 (24)	C-19 (6)	1683mm (66 in.)	7MV27-BA24E-K1A
Monitored	Vertical	32A	230	7.36kW	IEC 309 2P + E	C-13 (24)	C-19 (6)	1683mm (66 in.)	7MV22-BA24E-K1A
Monitored	Horizontal 1U	16A	230	3.68kW	IEC 309 C-20	C-13 (12)	-	480mm (19 in.)	7MH33-BA12Z-K1A
Smart	Vertical	16A	230	3.68kW	IEC 309 2P + E	C-13 (18)	C-19 (6)	1683mm (66 in.)	7NV20-BA18E-K1A
Smart	Vertical	16A	230/400 WYE	11.04kW	IEC 309 3P + N + E	C-13 (18)	C-19 (6)	1683mm (66 in.)	7NV26-BA18E-K1A
Smart	Vertical	32A	230	7.36kW	IEC 309 2P + E	C-13 (18)	C-19 (6)	1829mm (72 in.)	7NV22-BA18E-K1A
Smart	Vertical	32A	230/400 WYE	22.08kW	IEC 309 3P + N + E	C-13 (18)	C-19 (6)	1829mm (72 in.)	7NV27-BA18E-K1A

Alarms are settable with high or low thresholds with notifications via buzzer, email, or SNMP trap

Remote monitoring is established via an RJ45 port for network connection. Data can be downloaded in PDA, XML and SNMP formats

The LCD display provides the ability to view power data locally. The display is customizable for data type, unit of measure and unique device naming

Units have environmental monitoring capabilities through two RJ12 ports to support two separately purchased sensors directly, or up to 16 sensors connected via splitters



The browser-based interface is used to access charts, logs, and alarms

Switched and Managed PDUs

In addition to power monitoring, switched and managed PDUs enable users to remotely control individual receptacles by allowing equipment to be restarted or remotely shut down.

Switched PDUs

Switched PDUs combine total PDU power monitoring with port-level switching. They are the ideal solution when port control is needed but only aggregate consumption data is desired.

Managed PDUs

Managed PDUs offer the highest level of control and monitoring by providing outlet-level monitoring and outlet-level switching.

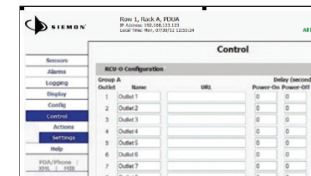
Units have environmental monitoring capabilities through two RJ12 ports to support two separately purchased sensors directly, or up to 16 sensors connected via splitters

Remote monitoring is established via an RJ45 port for network connection. Data can be downloaded in PDA, XML and SNMP formats

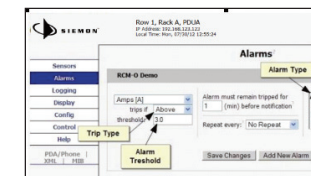
User definable URL for each outlet

The LCD display provides the ability to view power data locally. The display is customizable for data type, unit of measure and unique device naming

Type	Mounting	Input Current	Input Voltage	Power	Input Plug	Output Receptacles	Output Receptacles	Length	Part Number
North America									
Switched	Vertical	30A	120	2.9kW	NEMA L5-30P	5-15R (24)	-	1778mm (70 in.)	7SV06-AA24Z-K1A
Switched	Vertical	30A	208	5kW	NEMA L6-30P	C-13 (20)	C-19 (4)	1778mm (70 in.)	7SV08-BA20D-K1A
Switched	Vertical	30A, 3 phase	120 / 208 WYE	8.6kW	NEMA L21-30P	C-13 (21)	C-19 (3)	1829mm (72 in.)	7SV13-BA21C-K1A
Switched	Vertical	30A, 3 phase	208 DELTA	8.6kW	NEMA L15-30P	C-13 (21)	C-19 (3)	1829mm (72 in.)	7SV15-BA21C-K1A
Managed	Vertical	20A, 3 phase	120 / 208 WYE	5.8kW	NEMA L21-20P	C-13 (21)	C-19 (3)	1683mm (66 in.)	7WV11-BA21C-K1A
Managed	Vertical	30A	208	5kW	NEMA L6-30P	C-13 (20)	C-19 (4)	1778mm (70 in.)	7WV08-BA20D-K1A
Managed	Vertical	30A, 3 phase	120 / 208 WYE	8.6kW	NEMA L21-30P	C-13 (21)	C-19 (3)	1829mm (72 in.)	7WV13-BA21C-K1A
Managed	Vertical	35A, 3 phase	208 DELTA	10.1kW	IEC 3P / 4W	C-13 (21)	C-19 (3)	1829mm (72 in.)	7WV28-BA21C-K1A
Managed	Vertical	60A, 3 phase	208 DELTA	17.3kW	IEC 3P / 4W	C-19 (18)	C-19 (6)	1683mm (66 in.)	7WV25-BA18E-K1A
Managed	Vertical	20A	120 or 208	1.9 or 3.3kW	NEMA C-20	C-13 (8)	-	480mm (19 in.)	7WH19-BA08Z-K1A
International									
Switched	Vertical	16A, 3 phase	230/400 WYE	11.04kW	IEC 309 3P + N + E	C-13 (21)	C-19 (3)	1683mm (66 in.)	7SV26-BA21C-K1A
Switched	Vertical	16A	230	3.68kW	IEC 309 2P + E	C-13 (21)	C-19 (3)	1683mm (66 in.)	7SV20-BA21C-K1A
Switched	Vertical	32A, 3 phase	230/400 WYE	22.08kW	IEC 309 3P + N + E	C-13 (21)	C-19 (3)	1829mm (72 in.)	7SV27-BA21C-K1A
Switched	Vertical	32A	230	7.36kW	IEC 309 2P + E	C-13 (20)	C-19 (4)	1778mm (70 in.)	7SV22-BA20D-K1A
Managed	Vertical	16A, 3 phase	230/400 WYE	IEC 309 3P + N + E	IEC 309 3P + N + E	C-13 (21)	C-19 (3)	1683mm (66 in.)	7WV26-BA21C-K1A
Managed	Vertical	16A	230	IEC 309 2P + E	IEC 309 2P + E	C-13 (21)	C-19 (3)	1683mm (66 in.)	7WV20-BA21C-K1A
Managed	Vertical	32A, 3 phase	230/400 WYE	IEC 309 3P + N + E	IEC 309 3P + N + E	C-13 (21)	C-19 (3)	1829mm (72 in.)	7WV27-BA21C-K1A
Managed	Vertical	32A	230	IEC 309 2P + E	IEC 309 2P + E	C-13 (20)	C-19 (4)	1778mm (70 in.)	7WV22-BA20D-K1A
Managed	Horizontal 1U	32A	230	IEC 309 2P + E	IEC 309 2P + E	C-13 (8)	-	480mm (19 in.)	7WH22-BA08Z-K1A



Sequential start up and shut down to manage loads



The browser-based interface is used to access charts, logs, and alarms

Metered PDUs

Metered PDUs provides local visual monitoring capability through a built-in LED meter that displays real-time consumption data. Metered PDUs are a cost-effective alternative to monitored or switched PDUs when remote monitoring is not desired, while providing a more intelligent alternative to basic PDUs.

Ordering Information

Mounting	Input Current	Input Voltage	Power	Input Plug	Output Receptacles	Output Receptacles	Length	Part Number
North America								
Vertical	20A x 2	120 dual input	1.9kW x 2	NEMA 5-20P	5-20R (20)	-	1683mm (66 in.)	7TV02-AB20Z-K2A
Vertical	20A x 2	120 dual input	1.9kW x 2	NEMA L5-20P	5-20R (20)	-	1683mm (66 in.)	7TV05-AB20Z-K2A
Vertical	20A, 3 phase	120 / 208 WYE	5.8kW	NEMA L21-20P	6-20R (24)	-	1683mm (66 in.)	7TV11-AC24Z-K1A
Vertical	20A, 3 phase	120 / 208 WYE	5.8kW	NEMA L21-20P	C-13 (24)	C-19 (6)	1683mm (66 in.)	7TV11-BA24E-K1A
Vertical	20A, 3 phase	120 / 208 WYE	5.8kW	NEMA L21-20P	5-20R (24)	L6-20R (6)	1683mm (66 in.)	7TV11-AB24H-K1A
Vertical	30A	208	5kW	NEMA L6-30P	6-20R (24)	-	1683mm (66 in.)	7TV08-AC24Z-K1A
Vertical	30A	208	5kW	NEMA L6-30P	C-13 (24)	C-19 (6)	1683mm (66 in.)	7TV08-BA24E-K1A
Vertical	30A, 3 phase	120 / 208 WYE	8.6kW	NEMA L21-30P	5-20R (24)	-	1683mm (66 in.)	7TV13-AB24Z-K1A
Vertical	30A, 3 phase	120 / 208 WYE	8.6kW	NEMA L21-30P	C-13 (24)	C-19 (6)	1683mm (66 in.)	7TV13-BA24E-K1A
Vertical	30A, 3 phase	208 DELTA	8.6kW	NEMA L15-30P	C-13 (24)	C-19 (6)	1683mm (66 in.)	7TV15-BA24E-K1A
Vertical	60A	208	10kW	IEC 2P / 3W	C-13 (24)	C-19 (6)	1683mm (66 in.)	7TV24-BA24E-K1A
International								
Vertical	16A, 3 phase	230/400 WYE	11.04kW	IEC 309 3P + N + E	C13 (24)	C-19 (6)	1683mm (66 in.)	7TV26-BA24E-K1A
Vertical	32A	230	7.36kW	IEC 309 2P + E	C-13 (24)	C-19 (6)	1683mm (66 in.)	7TV22-BA24E-K1A
Vertical	32A, 3 phase	230/400 WYE	22.08kW	IEC 309 3P + N + E	C-13 (24)	C-19 (6)	1683mm (66 in.)	7TV27-BA24E-K1A
Horizontal 1U	32A	230	7.36kW	IEC 309 2P + E	C-13 (12)	-	480mm (19 in.)	7TH22-BA12Z-K1A

The 3 phase and 60A units measure current (amps) that scrolls through each phase



Single-phase PDUs measure power by scrolling through power factor, amps, volts and watts



Accessories



7ENS-TEMP
Temperature Sensor



7ENS-TEMPHAF
Temperature/ Airflow/ Humidity
Sensor



7ENA-SPLIT5.....
Splitter RJ12 x 5 way

SPECIFICATIONS

General	
Safety Compliance	UL 60950 (North America PDUs only) CE (International PDUs only)
Emissions	FCC Part 15 Class A
Cord Length	3m (10 ft.)
Circuit breakers	30A and higher units
Outlet Color Coding	On 3 phase units for load balancing
Material	18 Gauge Steel
Finish	Black powder coat
Warranty	3 Years
Environmental	
Operating Temperature	10°C (50°F) to 40°C (104°F)
Storage Temperature	-25°C (-13°F) to 65°C (149°F)
Operating Humidity	5% to 95% (non-condensing)
Storage Humidity	5% to 95% (non-condensing)
Operating Elevation	0 m (0 ft) to 2000 m (6561 ft)
Storage Elevation	0 m (0 ft) to 15240 m (50000 ft)
Networking	(not applicable to metered units)
Networking Protocols	HTTP, HTTPS (SSL/TLS), SMTP, POP3, ICMP, DHCP, TCP/IP, NTP, Telnet, Syslog
Ethernet Link Speed	10 Mbit; half-duplex
Data Formats	HTML, SNMP, CSV/Plain Text, XML

SIEMON WORLD WIDE LOCATIONS

THE AMERICAS

USA.....	(1) 866 474 1197
Canada.....	(1) 888 425 6165
Colombia - Latin America & Caribbean	(571) 317 2121
Argentina.....	(54) 11 5031 4061
Brazil.....	(55) 11 3831 5552
Mexico.....	(52) 55 2881 0438
Peru.....	(511) 275 1292
Venezuela.....	(58) 212 661 6538
Chile.....	(56) 2 321 2310

EUROPE, MIDDLE EAST AND AFRICA

United Kingdom.....	(44) (0) 1932 571771
Germany	(49) 2241 97398311
France	(33) 1 46 46 11 85
Italy	(39) 02 64 672 209
Middle East.....	(44) (0) 1932 571771 / (971) 506 441 470

ASIA PACIFIC

Australia (Sydney)	(61) 2 8977 7500
Australia (Brisbane)	(61) 7 3854 1200
Australia (Melbourne).....	(61) 3 9866 5277
Australia (Perth).....	(61) 8 9866 5277
Southeast Asia.....	(65) 6345 9119
China (Shanghai).....	(86) 21 5385 0303
China (Beijing)	(86) 10 6559 8860
China (Guangzhou).....	(86) 20 3882 0055
China (Chengdu)	(86) 28 6680 1100
India.....	(91) 11 46142162 / (91) 11 46142163
Japan	(81) (3) 5798 5790

Visit our website at www.siemon.com for detailed global office contact information

