

UPS for tower and rack from APC

System configurator and order-information guide

December 2008

Contents

Configurator diagram Line Interactive UPS
Configurator diagram Online UPS
Smart UPS for PRIMERGY Servers
Change Report



PRIMERGY Server

Configuration and Order Options for Uninterruptible Power Supplies (UPSs) from APC (American Power Conversion)

- Uninterruptible power supplies (UPSs) as floorstand units rated at 750 and 1500 VA
- Uninterruptible power supplies (UPSs) as rack modules rated at 1500 and 3000 VA.
- Uninterruptible power supplies (UPSs) as rack / tower convertible modules rated at 5000 VA.

Following software packages and cables are shipped with each UPS.

1.) Packages for all UPS till 1500 VA

- APC-UPS 750 VA (Floorstand), black S26113-E390-L750
- APC-UPS 1500 VA (Floorstand) S26113-E400-L1
- APC - UPS in a rack cabinet with 1500VA S26113-E393-E15: (2U, incl. Network Management card)
- APC - UPS in a rack cabinet with 1500VA S26113-E393-L15: (2U, incl. Network Management card), for mounting in FSC Racks

Package 1. is included in each UPS above :

- Power cord with connector to the UPS for a power dissipation up to 1500VA
- Black cable for the RS232-interface. (COM-signalcable for 1. server)
- 750 VA / 1500 VA Floorstand and Rackmount. includes a 3m USB cable.
- Power cord (up to 4x) with IEC 320 C13 connector to the outlet of the UPS
- CD-ROM with PowerChute Business Edition V7.0.5 for:
 - Windows® 2003 SP1, SP2 Standard/Enterprise/Web/Small Business Server
 - Windows® 2003 SP1, SP2 Standard/Enterprise Edition for x64
 - Windows® 2003 R2, R2 SP2 Standard/Enterprise
 - Windows® 2003 R2, R2 SP2 Standard/Enterprise for x64
 - MS Windows WEB Server 2008
 - MS Windows Server 2008; Standard w/o Hyper-V
 - MS Windows Server 2008; Enterprise w/o Hyper-V
 - MS Windows WEB Server 2008 (x64)
 - MS Windows Server 2008; Standard (x64) w/o Hyper-V
 - MS Windows Server 2008; Enterprise (x64) w/o Hyper-V
 - Red Hat Enterprise Linux AS / ES 3.0, 4.0, 5.0
 - SuSE Professional Linux 9.0, 10.0
 - SuSE Enterprise Server Linux 9.0, 10.0
 - Novell Netware 6.0 and 6.5
 - Solaris 8, 9, 10
- APC Configuration Wizard auf CD-Rom
- CD-Rom with PowerChute Network shutdown >= 2.2.2, including 24 Traps on CD for all UPS delivered with Network Management Card
 - Windows® 2003 SP1, SP2 Standard/Enterprise/Web/Small Business Server
 - Windows® 2003 SP1, SP2 Standard/Enterprise Edition for x64
 - Windows® 2003 SP2 Enterprise Edition for IA64
 - Windows® 2003 R2, R2 SP2 Standard/Enterprise
 - Windows® 2003 R2, R2 SP2 Standard/Enterprise for x64
 - MS Windows WEB Server 2008
 - MS Windows Server 2008; Standard w/o Hyper-V
 - MS Windows Server 2008; Enterprise w/o Hyper-V
 - MS Windows WEB Server 2008 (x64)
 - MS Windows Server 2008; Standard (x64) w/o Hyper-V
 - MS Windows Server 2008; Enterprise (x64) w/o Hyper-V
 - Red Hat Enterprise Linux AS / ES 4.0, 5.0 for 32bit, x64 and IA64
 - SuSE Professional Linux 9.0, 10.0
 - SuSE Enterprise Server Linux 9.0, 10.0 for 32bit, x64 and IA64
 - Novell Netware 6.0 and 6.5
 - Solaris 8, 9, 10
 - VMWare ESX 2.5 and 3.0

2.) Packages for all UPS over 1500 VA

- APC-UPS 3000 VA (2U, for 19" rack) S26113-E421-L30: (inclusive SNMP WEB Management Card)
- APC-UPS 3000 VA (2U, for 19" rack) S26113-E421-L30: (inclusive SNMP WEB Management Card), for mounting in FSC Rack
- APC-UPS 5000 VA (5U, for 19" rack) S26113-E442-L50: (5U inclusive SNMP WEB Management Card)

Package 2. is included in each UPS above :

- Power cord with IEC320 plug a power dissipation up to 1500VA,
- Power cord with IEC309 (CEE 16A blue) for the 3000 VA , for the 5000 VA you need an fix single phase connection made by an electrician according to the VDE standards, no power cord is delivered
- Black cable for the RS232-interface. (COM-signalcable for 1. server)
- 3000 VA Rackmount. includes a 3m USB cable.
- Power cord (up to 4x) with IEC 320 C13 connector to the outlet of the UPS
- Power cord (up to 2x) with IEC 320 C19 connector to the outlet of the UPS
- CD-ROM with PowerChute Business Edition V7.0.5 for:
 - Same OS released as for package 1
- APC Configuration Wizard on CD-Rom
- CD-Rom with PowerChute Network shutdown >= 2.2.2, including 24 Traps on CD for all UPS delivered with Network Management Card
 - Same OS released as for package 1

On the Server Start CD-Rom, distributed with every Primergy Server, are the agents for Server View.

The APC Products are integrated in Server View and Server Start.

If you use indication over the Network management card, USP requires only one LAN connector. Cable joints to the servers are required.

Additional components are:

- *COM port extension card for connecting a second and third server to a UPS
- *Grey COM-port signal cable for connecting a second and third server to a UPS (1,5 m) for the operating systems Novell, Linux, W2K and W3K or OS/2.
- *Grey COM-port signal cable for connecting a second and third server to a UPS (1,5 meters) for the operating systems SCO Open Server and UnixWare.
- *COM port signal extension cable (5 meters)
- *UPS Network Management adapter for 10/100 Base-T and Telnet connectors, supports 10/100 Mbit/s autosense and the protocols Telnet, FTP, TFTP, WEB and SNMP

A

Uninterruptible power supply for 230 V

If a UPS (uninterruptible power supply) is installed, one adapter angle up to 150Kg and for each server one extension cable must be ordered. If you configure a UPS with the System-Architect the extension cable plus a adapter angle for the PRIMECENTER Rack are added to the order list automatically !

UPS's with integrated **Network Management interface** make the extension of COM signals no longer necessary. Using the Network Management interface the number of nodes/ servers per UPS can easily be raised without increasing the effort in cabling or COM port extensions. For signalling via LAN is necessary only one LAN connection. However the max power of each UPS must be considered as always. A COM signal can be used, instead of the Network Management Card, as long as the respective components are ordered.

For more information about UPS configuration and notes for the UPS power calculation see UPS configurator.

All UPS until 3000VA will be connected with the provided power cord.
For 5000VA, you need a hard wired 1-phase-connector; a power cord is not provided; protection with 25 ampere.

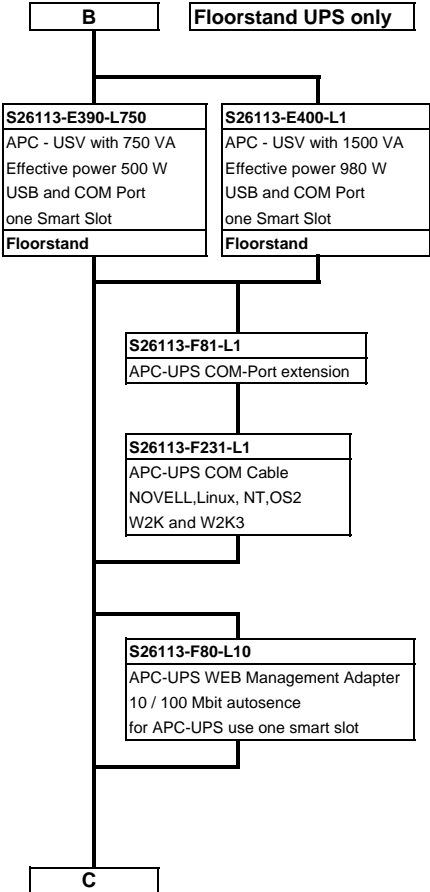
Attention! This UPS does not support 110V - connection

Power cord for following countries:	
1,8m grey 10A	
Only for USV's < 3000 VA possible	
T26139-Y1740-E10	D, A, B, F, NL, FIN, N, S, E, P, RUS, TR
T26139-Y1743-E10	Switzerland
T26139-Y1744-E10	UK, IR
T26139-Y1745-E10	Italy
T26139-Y1746-E10	Denmark
For each USV can be ordered a power cord.	



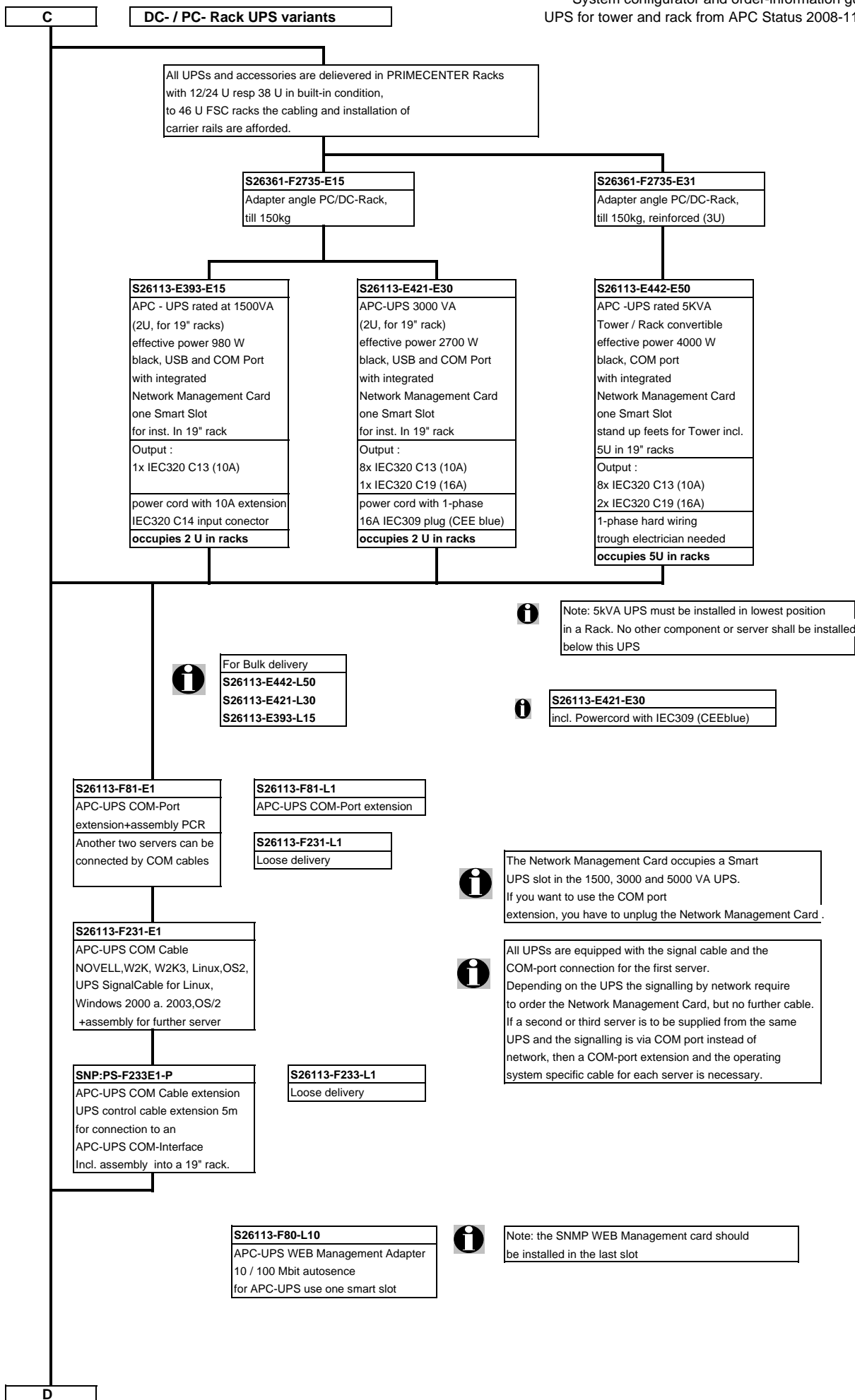
For all APC UPS's to 1500 VA you can order country-specific power cords additionally. For the 3000 VA UPS is needed a 16A (IEC320 C20) plug. Here a power cord with safety socket- and UK- plug is provided. The 5000 VA UPS has a 1-phase permanent connection, it must be attached by an electrician.

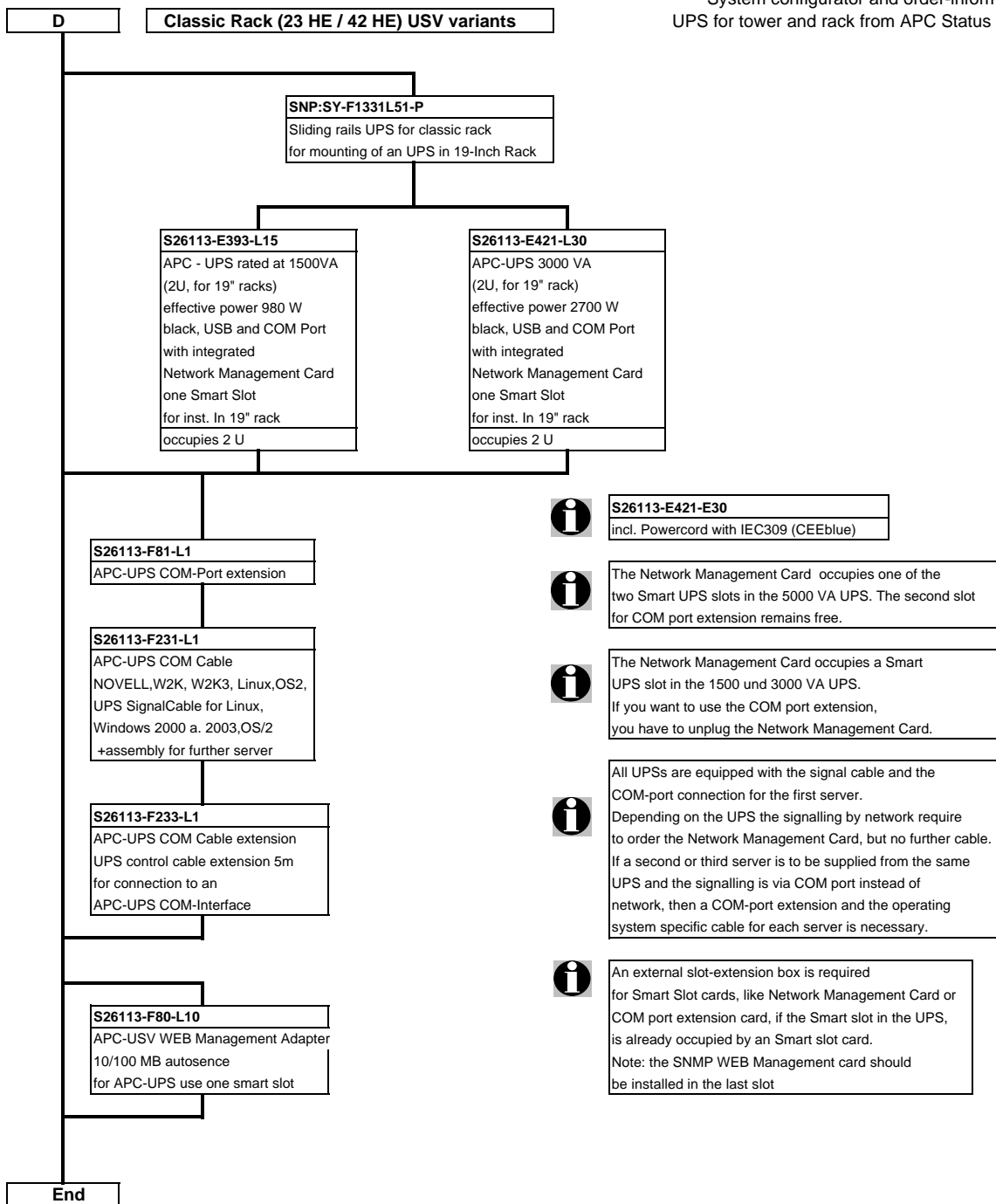
B



i All UPSs are equipped with the signal cable and the COM port connection for the first server.
 Depending on the UPS the signalling by network require to order the Network Management Card, but no further cable.
 If a second or third server is to be supplied from the same UPS and the signalling is via COM port instead of network, then a COM-port extension and the operating system specific cable for each server is necessary.

i An external slot-extension box is required for Smart Slot cards, like SNMP adapter or COM port extension card, if the Smart slot in the UPS, is already occupied by an Smart slot card.
 The slot-extension box has a Smart Slot.
 Maximally 2 boxes can be extended.





Configuration and Order Options for Uninterruptible Power Supplies (UPSs) from APC (American Power Conversion)

- Uninterruptible online power supplies (UPSs) as convertible tower / rack units rated at 3000, 5000, 8000 and 10000 VA.
- as well as external battery extensions for increasing the runtime

Following software packages and cables are shipped with each UPS.

1.) Packages for all online UPS till 20.000 VA

- APC-Online UPS 3000 VA (Tower / Rack 3U) S26361-K915-V30 / S26361-K915-V301 (Power cord with IEC309 (CEE 16A blue)plug)
- APC-Online UPS 5000 VA (Tower / Rack 3U) S26361-K915-V50 / S26361-K915-V501 (hard wired, 1-phase)
- APC-Online UPS 8000 VA (Tower / Rack 6U) S26361-K915-V80 (hard wired 1- phase or 3- phase selectable)
- APC-Online UPS 10.000 VA (Tower / Rack 6U) S26361-K915-V100 (hard wired 1- phase or 3- phase selectable)
- APC-Online UPS Runtime Extension (Tower / Rack 3U) S26361-K915-V1, for APC Online UPS 3KVA to 10KVA
- APC-Online UPS 20.000 VA (Stack / Rack 12U) S26361-K915-V200 (hard wired 1- phase or 3- phase selectable for input and output)
- APC-Online UPS Runtime Extension (Stack / Rack 6U) S26361-K915-V2, for APC Online UPS 20KVA only

included in each UPS package (refer above) :

- Power cord with IEC309 (CEE 16A blue) for the 3000 VA , for 5000 VA and above, you need a hard wired single phase connection made by an electrician according to the VDE standards, no power cord is delivered
- Black cable for the RS232-interface. (COM-signalcable for 1. server)
- Power cord (up to 4x) with IEC 320 C13 connector to the outlet of the UPS
- Power cord (up to 2x) with IEC 320 C19 connector to the outlet of the UPS
- additionally for 20kVA UPS a railset (UPS + Battery pack) and stacking brackets are included. A reinforced adapter angle has to be purchased additionally.
- APC Configuration Wizard on CD-Rom
- CD-Rom with PowerChute Network shutdown >= 2.2.2, including 24 Traps on CD for all UPS delivered with Network Management Card
 - Windows® 2003 SP1, SP2 Standard/Enterprise/Web/Small Business Server
 - Windows® 2003 SP1, SP2 Standard/Enterprise Edition for x64
 - Windows® 2003 SP2 Enterprise Edition for IA64
 - Windows® 2003 R2, R2 SP2 Standard/Enterprise
 - Windows® 2003 R2, R2 SP2 Standard/Enterprise for x64
 - MS Windows WEB Server 2008
 - MS Windows Server 2008; Standard w/o Hyper-V
 - MS Windows Server 2008; Enterprise w/o Hyper-V
 - MS Windows WEB Server 2008 (x64)
 - MS Windows Server 2008; Standard (x64) w/o Hyper-V
 - MS Windows Server 2008; Enterprise (x64) w/o Hyper-V
 - Red Hat Enterprise Linux AS / ES 4.0, 5.0 for 32bit, x64 and IA64
 - SuSE Professional Linux 9.0, 10.0
 - SuSE Enterprise Server Linux 9.0, 10.0 for 32bit, x64 and IA64
 - Novell Netware 6.0 and 6.5
 - Solaris 8, 9, 10
 - VMWare ESX 2.5 and 3.0

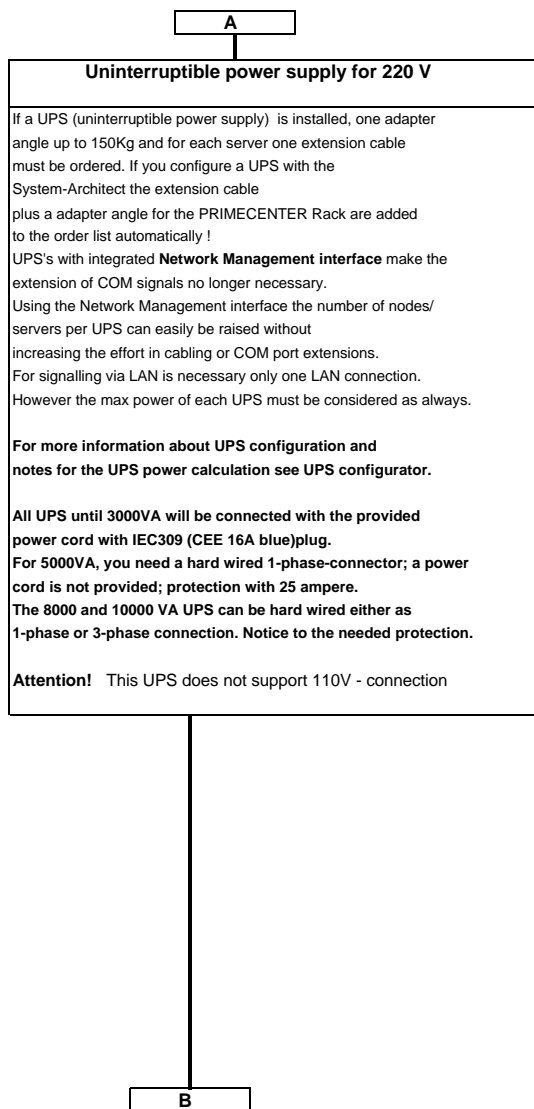
On the Server Start CD-Rom, distributed with every Primergy Server, are the agents for Server View.

The APC Products are integrated in Server View and Server Start.

If you use indication over the Network management card, USP requires only one LAN connector.

Cable joints to the servers are required.

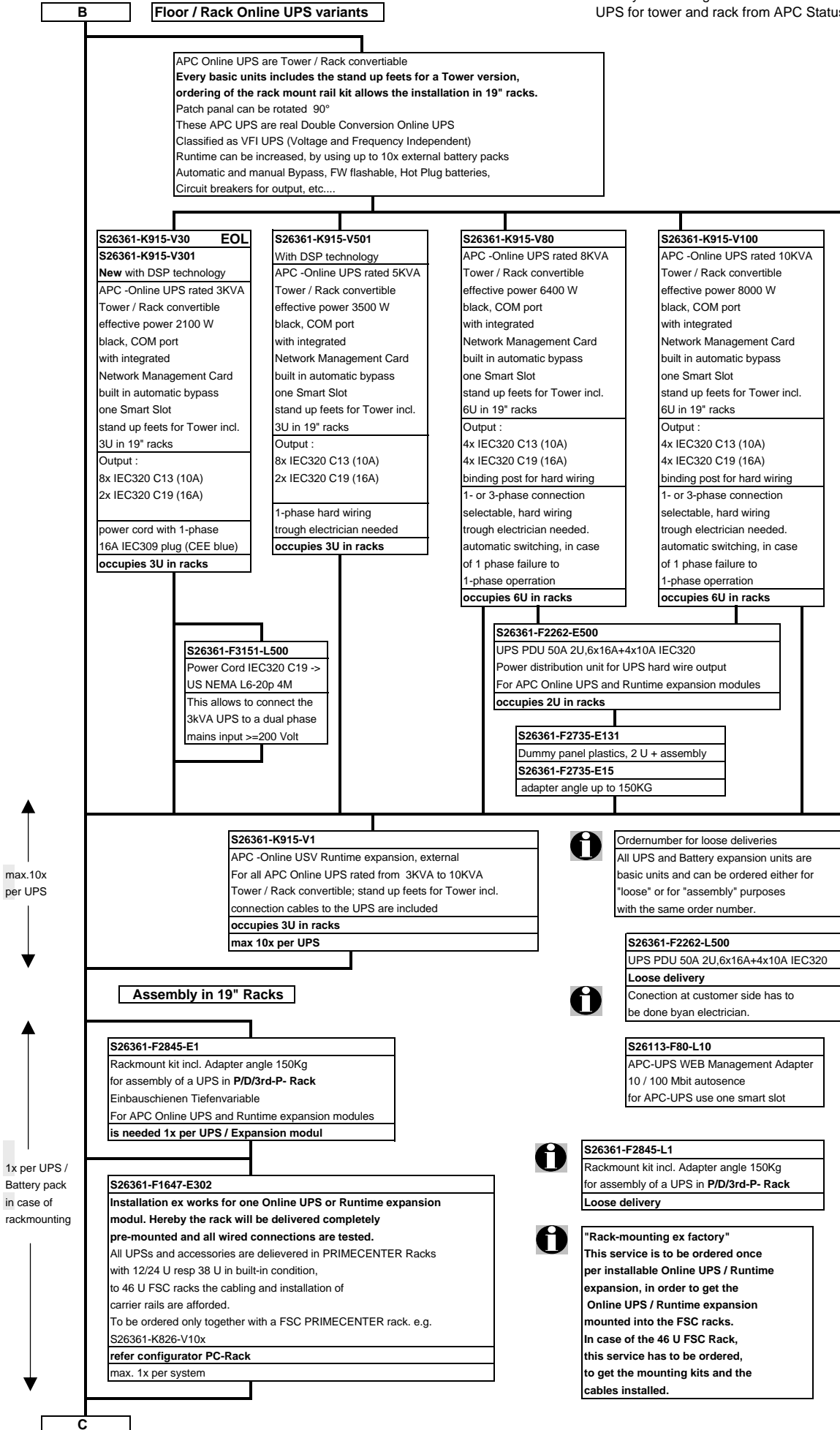
Signaling and UPS Management via LAN, no serial connections release with new DSP technology

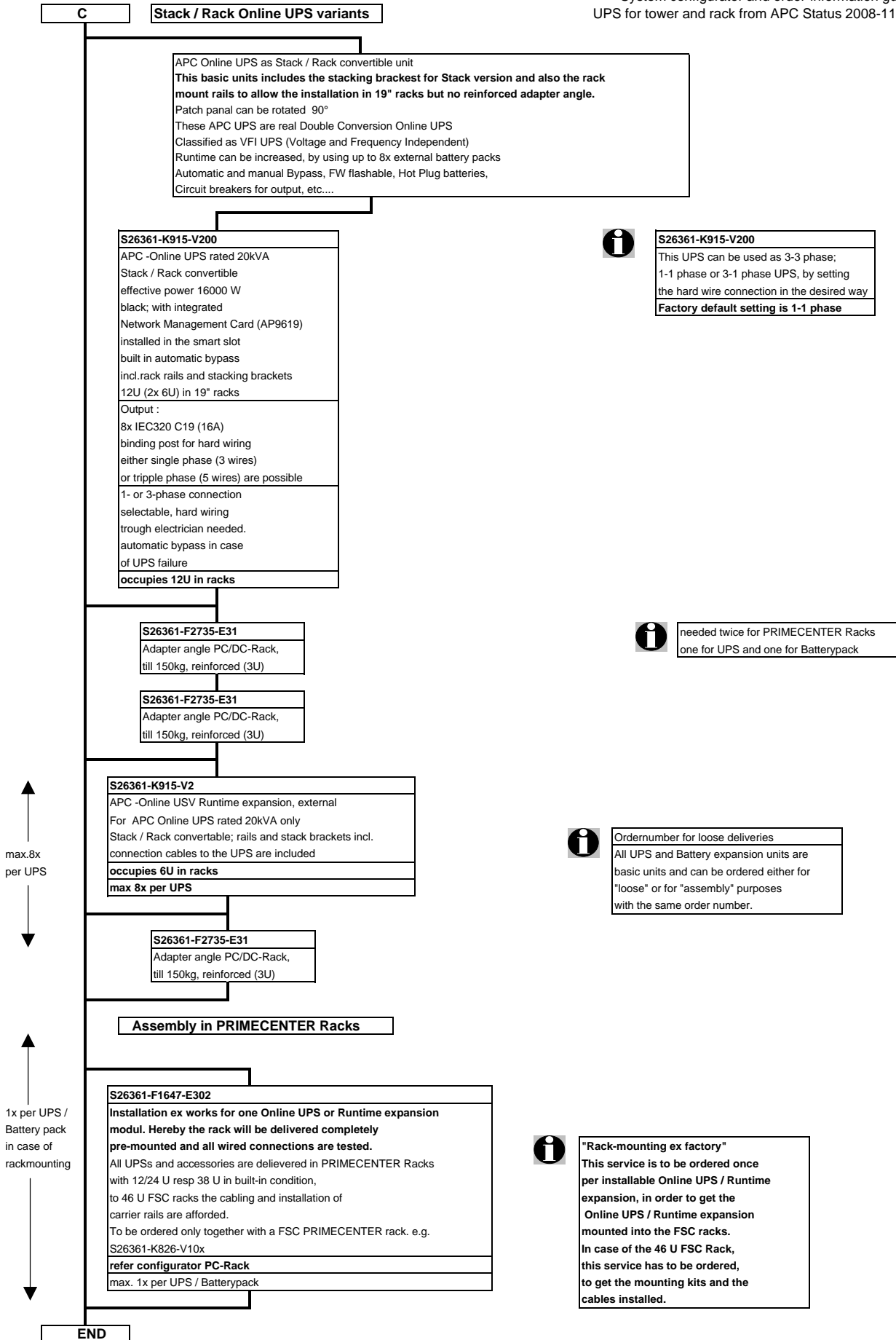


For the 3000 VA UPS is needed a 16A (IEC320 C20) plug. Here a power cord with IEC309 (16A CEE blue) is provided. The 5000 VA UPS has a 1-phase permanent connection, it must be attached by an electrician.



COM port access is not supported for 3kVA up to 20kVA Online UPS by Management SW.





Information about Smart USV in the internet see:

http://extranet.fujitsu-siemens.com/vil/pc/vil/primergy/components/pf_primergy_usv-dim_e.doc:internal&action=plain.action

