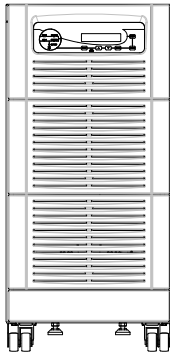


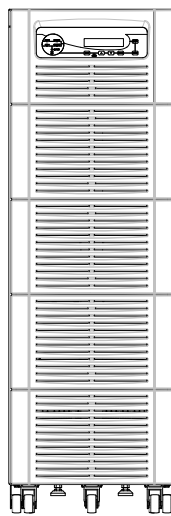
PowerScale 33 10-50 kVA

Available models

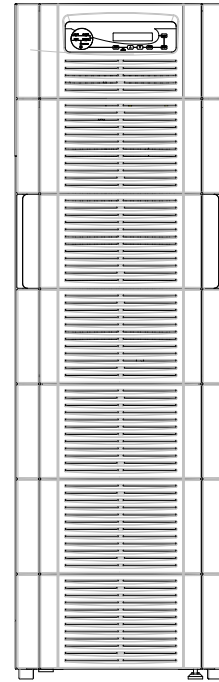
Cabinet A:10-15-20 kVA



Cabinet B:10-15-20-25 kVA



Cabinet C:25-30-40-50 kVA



Standard configuration

- Online double conversion UPS
- Capacities from 10 kVA to 50 kVA in three different cabinet sizes
- Input, bypass and battery protection fuses
- Manual bypass switch
- Up to 95.5% efficiency across a wide load range
- Single- and dual-input feed available
- Integrated back-feed protection
- Communication interfaces: RS-232 and USB ports, input dry contacts (EPO, GEN On, ...)
- With or without internal batteries
- Parallel ready (up to 20 units)
- Relay card with USB and output potential free contacts

Options

- Battery temperature sensor
- External battery cabinets
- ModBus RS-485, ModBus TCP/IP, SNMP

PowerScale 33 10-50 kVA

Technical specifications

General data	10kVA	15kVA	20kVA	25kVA	30kVA	40kVA	50kVA
Output power max.	9kW	13.5kW	18kW	22.5kW	27kW	36kW	45kW
Output power factor							0.9
Topology							Online double conversion
Parallel configuration							Up to 20 units in parallel configuration
UPS type							Standalone
Inbuilt batteries							Yes (model dependent)
Input							
Nominal input voltage	3×380V/220V+N, 3×400V/230V+N, 3×415V/240V+N						
Voltage tolerance (referred to ×400V/230V)	For loads <100% (-10%, +15%), <80% (-20%, +15%), <60% (-30%, +15%)						
Input distortion THDi	≤3 at 100% (sine wave)						
Frequency	35–70Hz						
Power factor	0.99 at 100% load						
Output							
Rated output voltage	3×380V/220V+N, 3×400V/230V+N, 3×415V/240V+N						
Voltage tolerance (referred to ×400V/230V)	1% (static), 4% (dynamic)						
Voltage distortion	<2% linear load, <4% non linear load (IEC/EN62040-3)						
Frequency	50Hz or 60Hz						
Overload capability	5 min.:110 % or 20 sec.: 125 % (10 kVA - 25 kVA); 10 min.: 110 % or 1 min.: 125 % (30 kVA - 50 kVA)						
Unbalanced load	100% (all three phases regulated independently)						
Crest factor	3:1 (load supported)						
Efficiency							
Overall efficiency	Up to 95.5%						
In eco-mode configuration	98%						
Environment							
Storage temperature	-25 °C to +70 °C						
Operating temperature	0 °C to +40 °C						
Altitude	1000m without derating						
Battery							
Battery type	7 Ah/8Ah, sealed, lead-acid, maintenance-free, 6-9 years design lifetime						
Battery replacement	Field-replaceable						
Battery voltage	Flexible voltage for longer backup times						
Max battery capacity	48 or 96×7/8Ah	48 or 96×7/8Ah	48 or 96×7/8Ah	96 or 144×7/8Ah	144×7/8Ah	144×7/8Ah	144×7/8Ah
Communications							
LCD	Yes (per module)						
LEDs	LED for notification and alarm						
Communication ports	RS-232, SNMP slot, USB and potential-free contacts						
Standards							
Safety	IEC/EN 62040-1						
Electromagnetic compatibility (EMC)	IEC/EN 62040-2						
Performance	IEC/EN 62040-3						
Product certification	CE						
Protection rating	IP 20						
Manufacturing	ISO 9001:2015, ISO 14001:2015, OHSAS18001						
Weight, dimensions							
Cabinet type	A or B	A or B	A or B	B or C	C	C	C
Weight	48 (cab A) - 68 (cab B)	48 (cab A) - 68 (cab B)	48 (cab A) - 68 (cab B)	68 (cab B) - 177 (cab C)	177 kg	177 kg	177 kg
Dimensions w×h×d (mm)	345×720×710 or 345×1045×710	345×720×710 or 345×1045×710	345×720×710 or 345×1045×710	345×1045×710 or 440×1400×910	440×1400×910	440×1400×910	440×1400×910

PowerScale 33 10-50 kVA

Ordering info table

UPS	External battery cabinet	Article number	Power (VA/W)	Batteries info	Typical runtime (min)	Dimensions WxHxD (mm)	Weight (kg)
UPS Powerscale 33 10kVA Cab.A w/o batt.		4NWP103584A1000	10000/9000			345x720x710	48
+	C-BATT88	4NWP103674BC088	10000/9000	2x44x28Ah	125	490x1400x940	1015*
UPS Powerscale 33 10kVA Cab.A 10 min		4NWP103584A1010	10000/9000	28x8Ah	10	345x720x710	118
UPS Powerscale 33 10kVA Cab.A 15 min		4NWP103584A1015	10000/9000	38x8Ah	15	345x720x710	143
UPS Powerscale 33 10kVA Cab.A 20 min		4NWP103584A1020	10000/9000	46x8Ah	20	345x720x710	163
UPS Powerscale 33 15kVA Cab.A w/o batt.		4NWP103584A1500	15000/13500			345x720x710	48
+	C-BATT88	4NWP103674BC088	15000/13500	2x44x28Ah	110	490x1400x940	1015*
UPS Powerscale 33 15kVA Cab.A 10 min		4NWP103584A1510	15000/13500	42x8Ah	10	345x720x710	153
UPS Powerscale 33 15kVA Cab.A 12 min		4NWP103584A1512	15000/13500	48x8Ah	12	345x720x710	168
UPS Powerscale 33 20kVA Cab.A w/o batt.		4NWP103584A2000	20000/18000			345x720x710	48
+	C-BATT88	4NWP103674BC088	20000/18000	2x44x28Ah	60	490x1400x940	1015*
UPS Powerscale 33 20kVA Cab.A 8 min		4NWP103584A2008	20000/18000	48x8Ah	8	345x720x710	168
UPS Powerscale 33 10kVA Cab.B w/o batt.		4NWP103584B1000	10000/9000			345x1045x710	68
+	C-BATT88	4NWP103674BC088	10000/9000	2x44x28Ah	125	490x1400x940	1015*
UPS Powerscale 33 10kVA Cab.B 30 min		4NWP103584B1030	10000/9000	2x32x8Ah	30	345x1045x710	228
UPS Powerscale 33 10kVA Cab.B 50 min		4NWP103584B1050	10000/9000	2x48x8Ah	50	345x1045x710	308
UPS Powerscale 33 15kVA Cab.B w/o batt.		4NWP103584B1500	15000/13500			345x1045x710	68
+	C-BATT88	4NWP103674BC088	15000/13500	2x44x28Ah	110	490x1400x940	1015*
UPS Powerscale 33 15kVA Cab.B 20 min		4NWP103584B1520	15000/13500	2x36x8Ah	20	345x1045x710	248
UPS Powerscale 33 15kVA Cab.B 30 min		4NWP103584B1530	15000/13500	2x46x8Ah	30	345x1045x710	298
UPS Powerscale 33 20kVA Cab.B w/o batt.		4NWP103584B2000	20000/180000			345x1045x710	68
+	C-BATT88	4NWP103674BC088	20000/180000	2x44x28Ah	60	490x1400x940	1015*
UPS Powerscale 33 20kVA Cab.B 20 min		4NWP103584B2020	20000/180000	2x44x8Ah	20	345x1045x710	288
UPS Powerscale 33 20kVA Cab.B 22 min		4NWP103584B2022	20000/180000	2x48x8Ah	22	345x1045x710	308
UPS Powerscale 33 25kVA Cab.B w/o batt.		4NWP103584B2500	25000/22500		25	345x1045x710	68
+	C-BATT88	4NWP103674BC088	25000/22500	2x44x28Ah	50	490x1400x940	1015*
UPS Powerscale 33 25kVA Cab.B 15 min		4NWP103584B2515	25000/22500	2x48x8Ah	15	345x1045x710	308

UPS	External battery cabinet	Article number	Power (VA/W)	Batteries info	Typical runtime (min)	Dimensions WxHxD (mm)	Weight (kg)
UPS Powerscale 33 25kVA Cab.C w/o batt.		4NWP103584C2500	25000/22500			440x1400x910	177
+	C-BATT88	4NWP103674BC088	25000/22500	2x44x28Ah	50	490x1400x940	1015*
UPS Powerscale 33 25kVA Cab.C 20 min		4NWP103584C2520	25000/22500	3x46x8Ah	20	440x1400x910	522
UPS Powerscale 33 30kVA Cab.C w/o batt.		4NWP103584C3000	30000/27000			440x1400x910	177
+	C-BATT88	4NWP103674BC088		2x44x28Ah	42	490x1400x940	1015*
UPS Powerscale 33 30kVA Cab.C 10 min		4NWP103584C3010	30000/27000	3x28x8Ah	10	440x1400x910	387
UPS Powerscale 33 30kVA Cab.C 15 min		4NWP103584C3015	30000/27000	3x36x8Ah	15	440x1400x910	447
UPS Powerscale 33 30kVA Cab.C 20 min		4NWP103584C3020	30000/27000	3x48x8Ah	20	440x1400x910	537
UPS Powerscale 33 40kVA Cab.C w/o batt.		4NWP103584C4000	40000/36000			440x1400x910	177
+	C-BATT88	4NWP103674BC088	40000/36000	2x44x28Ah	31	490x1400x940	1015*
UPS Powerscale 33 40kVA Cab.C 10 min		4NWP103584C4010	40000/36000	3x36x8Ah	10	440x1400x910	447
UPS Powerscale 33 40kVA Cab.C 15 min		4NWP103584C4015	40000/36000	3x48x8Ah	15	440x1400x910	537
UPS Powerscale 33 50kVA Cab.C w/o batt.		4NWP103584C5000	50000/45000			440x1400x910	177
+	C-BATT88	4NWP103674BC088	50000/45000	2x44x28Ah	21	490x1400x940	1015*
UPS Powerscale 33 50kVA Cab.C 10 min		4NWP103584C5010	50000/45000	3x46x8Ah	10	440x1400x910	522

* batteries included

Table 7: Ordering info

9 Accessories

Accessory compatibility matrix

UPS														Accessories	
	AS400 relay card	MiniAS400 relay card	WebPro SNMP	Winpower SNMP	Mini Winpower SNMP	WebPro ModBus	Winpower ModBus	Mini Winpower ModBus	EMP	CS141 Basic	CS141 Advanced	CS141 ModBus	ATS-16	External main- tenance bypass with PDU	
PowerValue 11T G2 1-3 kVA (B/S)	•			•			•	•							
PowerValue 11T G2 6-10 kVA (B/S)	•			•			•		•	•	•	•			
PowerValue 11RT G2 1-3 kVA (B/S)	•		•			•			•	•	•	•	•	•	
PowerValue 11RT G2 6-10 kVA (B/S)	•			•			•		•	•	•	•		•	
PowerValue 11/31T 10-20 kVA	•			•			•		•	•	•	•			
PowerScale 33 10-50 kVA									•	•	•				

Table 8: Accessory compatibility matrix

PowerValue 11RT G2 1-3 kVA (B/S) can be connected via RS232 to a CS141 box version. The CS141 slot version can be connected to the UPS via RS232 with an external enclosure; please contact ABB for further information

9a Connectivity options

Smart power monitoring for single or multiple systems

ABB offers intelligent solutions that monitor the status of your power system and thus ensure your data storage equipment or control process continues to receive clean, reliable power. The monitoring devices provide real-time visibility of the condition of your power equipment and help to identify problematic trends before they become critical.

Power and environmental monitoring

Network interface cards connect ABB's UPS systems to the network. These cards also provide the ability to connect several environmental sensors to the UPS. This combination allows for a clear visual representation on a web interface of not only the UPS system but also its environment.

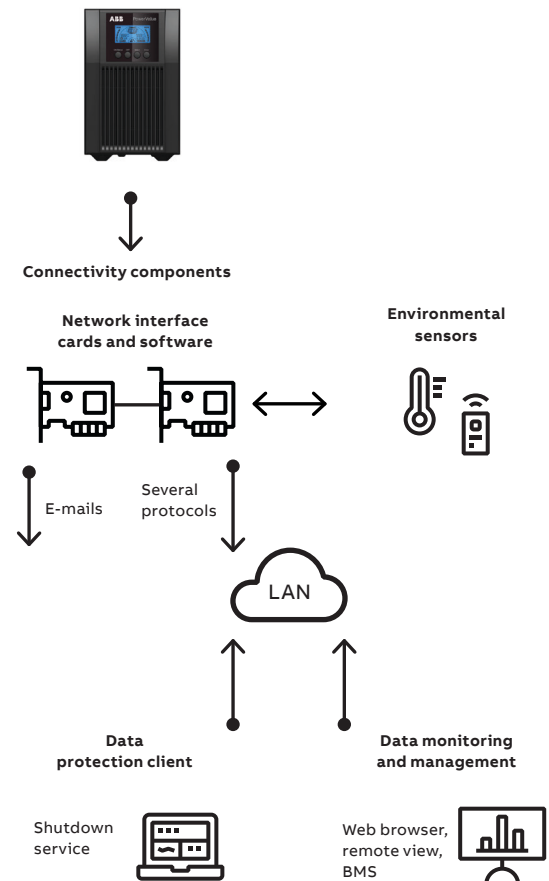
Management software

The network interface cards are provided with extensively configurable software that provide access to measurement values and to the UPS's status information. The status of each UPS cabinet, UPS module or the entire system can be presented on a separate mimic diagram. These diagrams provide users with clear, real-time information. During normal operation, records of all events are kept in a log file. In case of a power failure, battery autonomy is monitored and network shutdown of the protected devices is initiated.

Data protection

The remote shutdown software manages a particular workstation, network or servers. Shutdown or reboot can be executed safely.

In addition, text messages, e-mails, pop-ups and mobile messages can be dispatched or displayed before the devices are shut down – giving the user the flexibility to manage or cancel the operation.



Highlights

- Remote monitoring via web
- Environmental monitoring
- Extensive alarm handling and dispatching
- Redundant UPS monitoring
- Integration into network or building management system
- Integration into multivendor and multiplatform environments
- ModBus interface
- Multiple standard protocols are supported

Applications

- Personal computers
- Servers and network devices
- Data centers
- Storage systems
- Industrial automation
- Power systems

AS400 and Mini AS400

AS400 and Mini AS400 are two plug-and-play cards installed in the UPS intelligent slot. They provide dry contact signals to inform

the user about different UPS operative statuses and send alerts in case of disruptions:

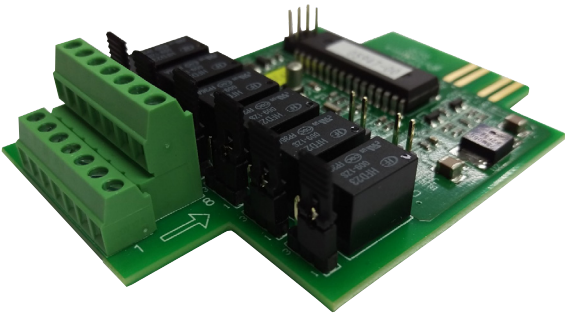
Alarms

- AC mains failure
- UPS fault
- UPS running in bypass mode
- Communication error
- Battery low

Indicator

- Bypass active
- UPS ON

Additionally, these cards provide input dry contacts to switch the UPS on and off.



Product description	Article number
AS400 slot card with dry contacts	4NWP100120R0001
AS400 mini slot card with dry contacts	4NWP100120R0002
AS400 slot card with dry contacts (for 11RT G2 1-3 kVA)	4NWP100220R0001

Table 9: Ordering info table

Winpower and WebPro

The Winpower and WebPro series are the budget solution that enables the integration of the UPS within Ethernet and ModBus networks.



With Winpower and WebPro slot cards, the operator can easily monitor the UPS status and send commands through a user-friendly web-based interface to control the UPS itself; the same action is also possible via a network management software that supports the SNMP protocol. Winpower and WebPro are easy to install in the UPS intelligent slot and they are both provided along with a CD containing SPS software, a must-have utility to program the remote shutdown of the most common server platforms.

EMP (Environmental Monitoring Probe) is a multi-sensor that collects external temperature and relative humidity data in the environment where the UPS has been installed.



It is easily connected to Winpower and WebPro cards and enables the operator to remotely monitor these crucial parameters to correctly operate the UPS.



Additionally, it alerts the system administrator in case temperature and relative humidity values go beyond pre-set thresholds.

Winpower and WebPro ModBus slot cards enable UPS monitoring and control via ModBus protocol over RS232 or RS485.

The cards provide two serial interfaces and a RS232/RS485 conversion.

Product description	Article number
Winpower SNMP card	4NWP100110R0001
Mini Winpower SNMP card	4NWP100110R0002
Winpower ModBus card	4NWP104039R0001
Mini Winpower ModBus card	4NWP104039R0002
WebPro SNMP card (for 11RT G2 1-3 kVA)	4NWP100230R0001
WebPro ModBus card (for 11RT G2 1-3 kVA)	4NWP100221R0001
EMD for Winpower and Mini Winpower	4NWP104040R0001
EMD for WebPro	4NWP100222R0001

Table 10: Ordering info table

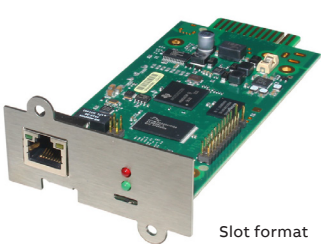
CS141

CS141 represents the ABB premium connectivity offering by providing the user with a full set of products and accessories for UPS remote monitoring and control.

Available in three models (Base, Advanced, and ModBus) and two different formats (slot and box),

CS141 enables the IoT concept and simplifies the integration of the UPS within the network to bring the operator the state-of-art UPS monitoring technology.

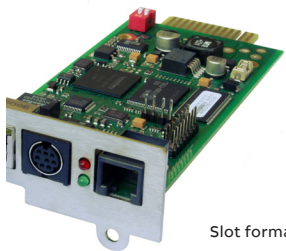
All CS141 products are provided with one free RCCMD client and UPS monitoring software.



Slot format

CS141 Basic
For interfacing the UPS to the network without the need for additional sensors or interfaces. Available in slot and box formats.

Supports the following protocols	
1 HTTP	4 ModBus TCP
2 SNMP	5 Telnet FPT
3 SMTP (e-mail)	



Slot format

CS141 Advanced
For interfacing the UPS to the network and allowing users to connect additional sensors and I/O options either directly to the card or via sensor manager. Available in slot and box formats.

Supports the following protocols	
1 HTTP	4 ModBus TCP
2 SNMP	5 Telnet FPT
3 SMTP (e-mail)	6 ModBus RS-232



Box format

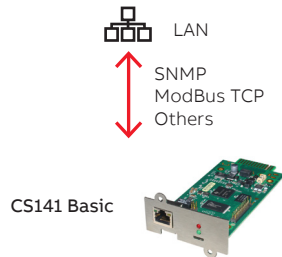
CS141 ModBus
For interfacing the UPS to the network and the ModBus RS-485 with an option to connect alarm buzzers or an additional relay board. Available in slot and box formats.

Supports the following protocols	
1 HTTP	4 ModBus TCP
2 SNMP	5 Telnet FPT
3 SMTP (e-mail)	6 ModBus RS-485

Slot cards are UPS-powered, while cards in box format require external power.

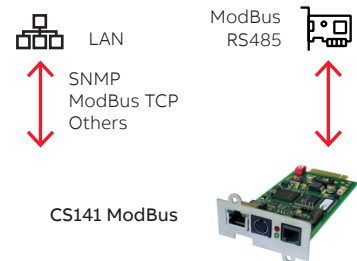
Connectivity and sensor options for CS cards and boxes

Basic

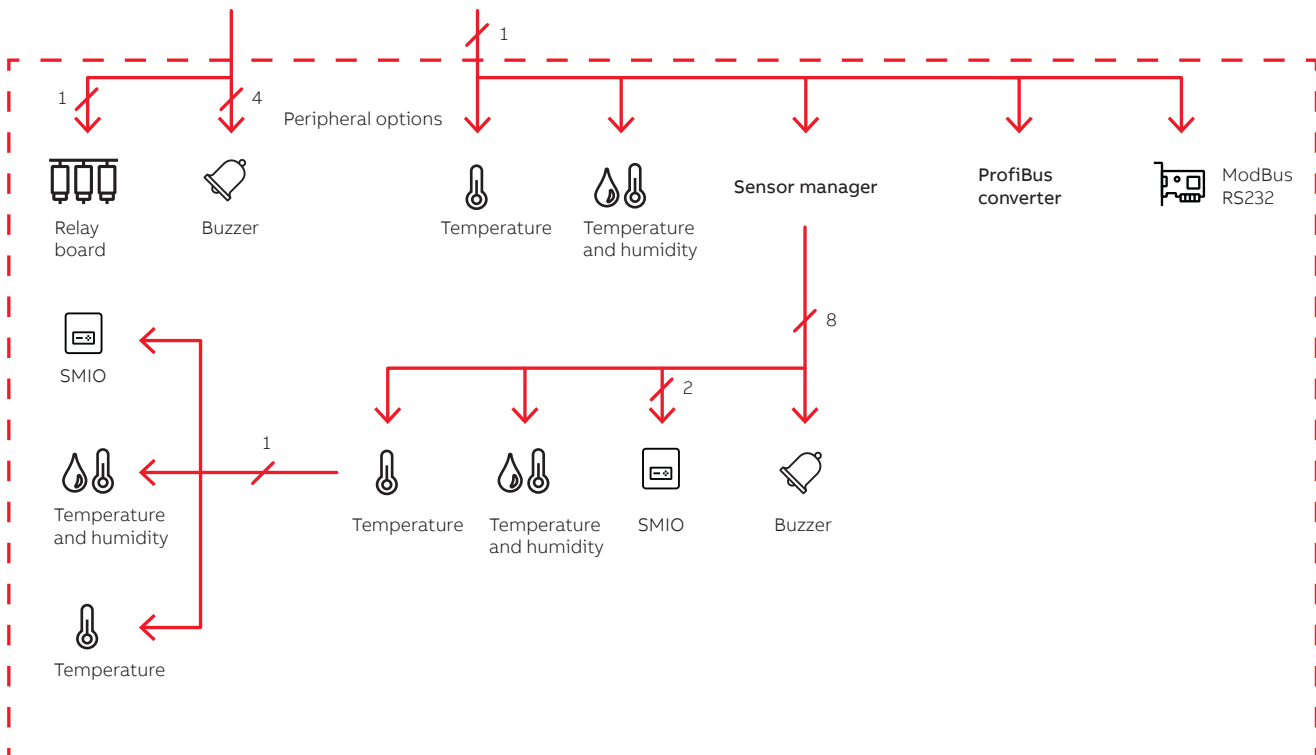
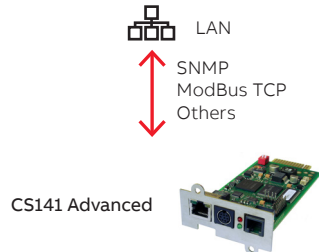


No peripherals

ModBus



Advanced



List of connectivity and sensor options for different network interfaces

Article number		Product description		Details	
CS141	Network interface*	4NWP102687R0001	Box	CS141 Basic	No sensor options
		4NWP102688R0001	Slot	CS141 Basic	No aux options
		4NWP102879R0001	Box	CS141 Advanced	Optional sensors
		4NWP102880R0001	Slot	CS141 Advanced	Aux connection
		4NWP102881R0001	Box	CS141 ModBus	ModBus RS485
		4NWP102882R0001	Slot	CS141 ModBus	Aux connection
	I/O options	4NWP103268R0001		Alarm buzzer CS141	Buzzer, 60 dB 5 m cable
		4NWP103097R0001		Relay board CS141	4 digital inputs 4 relay outputs 1 m cable
		04-0594		Profibus converter	External DIN rail mount device
		00-6944		Temperature sensor	-25 °C to +100 °C, ± 0.5% 1.8 m cable
		04-3880	Combisensor for temperature and humidity	-25 °C to +100 °C, ± 0.5% 0% to 100% RH, ± 5%	1.8 m cable
	Sensor manager options	00-5915		Sensor manager	Environmental interface
		00-5916		Temperature sensor	0 °C to +100 °C, ± 0.5% 5 m cable
		00-6948	Combisensor for temperature and humidity	0 °C to +100 °C, ± 0.5% 0% to 100% RH, ± 5%	5 m cable
		00-6945		Alarm buzzer	85 dB 5 m cable
		00-6947		Relay box	1 input contact 1 output contact 5 m cable
	RCCMD	04-3869		RCCMD license	For Windows, Linux, MAC X, OS / 2, UNIX, NOVELL
		04-3870		RCCMD license	For IBM AS 400 V4R5, V5, V6, V7
		01-0014		RCCMD enterprise license	>50 licenses (Windows, Linux, MAC X, OS / 2, UNIX, NOVELL)

Sensor connections



Table 11: Ordering info table

9b Electrical options

ATS-16



The ATS-16 is a two-way, single-phase, automatic switch powered by two independent synchronous or asynchronous AC power supply sources (typically two feeding UPSs upstream).

One of the two sources can be designated as the preferred power supply, to which the ATS-16 will transfer the load. The ATS-16 promptly switches to the other source in the event of primary source failure.

Easy to install in a rack-mount (1RU only) or vertical configuration, the ATS-16 has an intuitive interface with LED indicators and push buttons.

The ATS-16 enhances the system reliability due to internal back-feed protection and complete protection for overload and short-circuit.

Product description	Article number
ATS-16	4NWP104041R0001

Table 12: Ordering info table

External maintenance bypass with PDU



The external maintenance bypass with PDU delivers a maintenance bypass feature and convenient power distribution.

This enables the user to service the UPS in a safe and proper manner by excluding any risk for the operator while the load is powered by the AC mains.

This feature is available for the PowerValue 11RT G2 entire range. The PowerValue 11RT G2 UPS within the 6-10 kVA range offers a unique mounting concept with 0 RU occupied in the installation due to flexible mounting brackets.

Product description	Article number
External maintenance bypass with PDU PowerValue 11RT G2 1-3 kVA	4NWP101737R0001
External maintenance bypass with PDU PowerValue 11RT G2 6-10 kVA	4NWP101737R0002

Table 13: Ordering info table

9c Mechanical options

Rack mounting kit for PowerValue 11RT G2



Mechanical kit made by 2 rails to fit the PowerValue 11RT G2 UPS and EBM within a standard 19” rack.

Product description	Article number
Rack mounting kit PowerValue 11RT G2 1-3 kVA (UPS and EBM)	4NWP100211R0001
Rack mounting kit PowerValue 11RT G2 6-10 kVA (UPS)	4NWP100111R0003
Rack mounting kit PowerValue 11RT G2 6-10 kVA (EBM)	4NWP100111R0004

Table 14: Ordering info table

10 Warranty matrix and extension pricelist

A flexible lifetime warranty plan is available to provide coverage for the UPS.

The optional warranty extension must be purchased at the time of the UPS purchase. The warranty protects the UPS only (not the batteries).

Product family	Base warranty	Warranty extension	Warranty extension article number
PowerValue 11LI Up/Pro 600-2000 VA	2 years	-	-
PowerValue 11T G2 1-3 kVA	2 years	1 year (max 3 years)	4NWP104078R0001
PowerValue 11T G2 6-10 kVA	2 years	1 year (max 3 years)	4NWP104079R0001
PowerValue 11RT G2 1-3 kVA	3 years	1 year (max 2 years)	4NWP104078R0001
PowerValue 11RT G2 6-10 kVA	3 years	1 year (max 2 years)	4NWP104079R0001
PowerScale 11/31T 10-20 kVA	2 years	1 year	4NWP101080R0001
PowerScale 33 10-25 kVA (cab A,B)	1 year	1 year	00-5517
PowerScale 25-50 kVA (cab C)	1 year	1 year	04-3254

Table 15: Warranty matrix and extension pricelist