



SLC CUBE3+ Uninterruptible power supply system from 7.5 to 200 kVA

SLC CUBE3+: Energy efficiency with superior electrical protection

Salicru's **SLC CUBE3+** series is a UPS range featuring high-performance, On-line double conversion (VFI) technology that provides a reliable, high-quality power supply and, at the same time, achieves significant energy and financial savings in terms of installation and operating costs.

Particularly noteworthy is the unit's input power factor (PF=1) and its extremely low distortion rate (THDi even lower than 1%), which help to reduce installation and operating costs, and contribute to improving the quality of the electrical network.

The output power factor (PF=0.9) also stands out, providing optimum electrical protection for computer systems and low harmonic output distortion (THDv even lower than 0.5%), enabling it to protect any type of load (inductive, resistive, capacitive or mixed). In addition, the performance achieved (up to 95% in On-line mode and 98% in Smart Eco-mode) produces significant energy consumption savings and reduces air conditioning needs.

For a full optimum solution, the **SLC CUBE3+** provides maximum adaptability (even with the standard model), the possibility of parallel redundant expansion and extensive communication options. Finally, also worth noting is the unit's lightweight design and reduced dimensions, enabling it to be easily installed and ensuring that footprint is minimal.

Performances

- On-line double conversion (VFI) technology with DSP control.
- Input power factor 1, for better performance.
- Very low input current harmonic distortion (THDi as low as <1%).
- Total flexibility in input/output voltage.⁽¹⁾
- Designed to withstand any type of load.
- Batt-Watch function for monitoring and battery care.
- High output power factor (PF=0.9).
- Very low output voltage distortion rate (THDv even lower than 0.5%).
- On-line mode efficiency of up to 95%.
- Smart Eco-mode efficiency of up to 98.4%.
- Touch screen 7" color.⁽²⁾
- Very compact design with minimal footprint.
- Can be integrated into the most advanced IT environments.
- Parallel redundant configuration (N+1) for critical installations.⁽³⁾
- Built with 80% recyclable materials.
- SLC Greenergy solution.



SLC CUBE3 +

(1) Single/single, single/three and three/single configurations up to 60 kVA

(2) According to model

(3) Up to 4 units

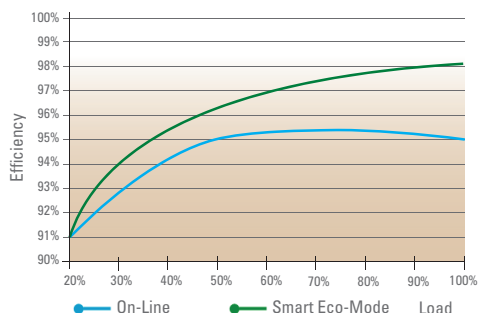


Applications: Designed to protect any type of environment

High-end design features plus great flexibility capacity (options, power upgrading, communications, ...) make **SLC CUBE3+** series the best option to protect and secure a wide range of environments: data-centres, hosting, housing, IT-networks, server farms, voice and data networks,...

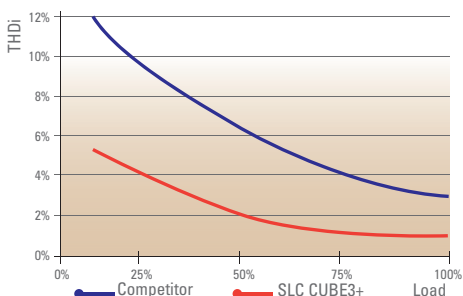
High efficiency

High performance in On-line and Smart Eco-mode operation.



Low harmonic distortion

The lowest harmonic distortion in the market.



Options

- Ethernet/SNMP adapter.
- SICRES adapter for remote management.
- Android wireless link.
- Monitoring, management and shutdown software.
- 1 x additional RS-232/485 serial port.
- Extended backup times.
- Common battery set for parallel systems.
- BACS II, battery monitoring, regulation and alarms.
- Dual-level charger for NiCd batteries.
- Separate bypass line.
- Touch screen 7" color.⁽¹⁾
- Single/single, single/three and three/single configurations.⁽¹⁾
- External manual bypass.
- Temperature and humidity sensors.
- External display.
- Frequency converter function.

(1) Up to 60 kVA

Technical support and service

- Pre and post-sales advice.
- Start-up.
- Telephone technical support.
- Preventative/corrective intervention.
- Maintenance contracts.
- SICRES remote maintenance contracts.
- Training courses.



SLC CUBE3+



Uninterruptible power supply system from 7.5 to 200 kVA

TECHNICAL SPECIFICATIONS

MODEL		SLC CUBE3+	
TECHNOLOGY		On-line, double conversion, HF, DSP control	
INPUT	Nominal voltage ⁽¹⁾	Single-phase 120 / 127 / 220 / 230 / 240 V Three-phase 3 x 208 / 3 x 220 / 3 x 380 / 3 x 400 / 3 x 415 V (3P + N)	
	Voltage margin	+15% / -20% (configurable)	
	Frequency	50 / 60 Hz	
	Total Harmonic Distortion (THDi)	7.5 ÷ 20 kVA	100% load: <1.5% / 50% load: <2.5% / 10% load: <6.0%
		30 ÷ 80 kVA	100% load: <1.0% / 50% load: <2.0% / 10% load: <5.0%
		100 ÷ 200 kVA	100% load: <1.5% / 50% load: <2.0% / 10% load: <6.0%
	Power factor	1 from 10% load	
Rectifier topology	Three-phase IGBT full wave, soft start, PFC, transformerless		
OUTPUT	Nominal voltage ⁽¹⁾	Single-phase 120 / 127 / 220 / 230 / 240 V Three-phase 3 x 208 / 3 x 220 / 3 x 380 / 3 x 400 / 3 x 415 V (3P + N)	
	Accuracy	State	± 1% steady / ± 2% dynamic
		Response time	20 ms for load steps 0% ÷ 100% and voltage drop up to -5%
	Frequency	Synchronised	50/60 Hz ±5 Hz (selectable)
		Free running	50/60 Hz ±0.05%
	Maximum synchronisation speed	From 1 Hz/s to 10 Hz/s (programmable)	
	Total Harmonic Distortion (THDv)	Linear load	<0.5%
		Nonlinear load	<1.5% (EN-62040-3)
	Output Power Factor	0.9	
	Admissible overload	125% for 10 min / 150% for 60 s	
	Admissible crest factor	>3:1	
Total efficiency in On-line mode	7.5÷60 kVA: 92.0%÷93.0% / 80÷200 kVA: 94.0%÷95.0%		
Efficiency in Smart Eco-mode	Up to 98.4%		
STATIC BYPASS	Type and activation criteria	Solid state, controlled by microprocessor	
	Transfer time	On-line mode	Nil
		Smart Eco-mode	4 ms (typical)
Transfer to bypass	Immediate, for overloads exceeding 150%		
Retransfer	Automatic, after alarm deactivation		
MANUAL BYPASS	Type	Without interruption	
BATTERIES	Type (standard)	Lead acid, sealed, maintenance free	
	Charge voltage regulation	Batt-Watch	
COMMUNICATION	Ports	1 x RS232/RS485 + 1xUSB, with Modbus protocol	
	Interface to relays	4 x AC failure, bypass, low battery and general	
	Free slots	1, for SNMP/SICRES	
	Display	Up to 60 kVA	LCD display, LEDs and keyboard
From 80 kVA		Touch screen 7" color	
GENERAL	Operating temperature	0° C ÷ +40° C	
	Relative humidity	Up to 95%, non-condensing	
	Operating altitude	2,400 masl ⁽³⁾	
	Acoustic noise at 1 metre	<52 dB(A) ⁽²⁾	
STANDARDS	Safety	EN-62040-1-2; EN-60950-1	
	Electromagnetic Compatibility (EMC)	EN-62040-2	
	Operating	VFI-SS-111 according to EN 62040-3	
	Quality and Environmental Management	ISO 9001 and ISO 14001	

(1) Single-phase 120 / 127 V available up to 30 kVA inclusive and three-phase 3 x 208 / 3 x 220 V available up to 100 kVA inclusive.

(2) <65 dB(A) for 80 to 120 kVA models / <70 dB(A) for 160 and 200 kVA models.

(3) Power derating for higher altitudes up to 5000 masl.

RANGE

MODEL	POWER (kVA / kW)	N° CABINETS (UPS + BAT)	UPS DIMENSIONS (D x W x H mm)	WEIGHT (kg)	BAT DIMENSIONS (D x W x H mm)	WEIGHT (kg)
SLC-7.5-CUBE3+	7.5 / 6.75	1 + 0	775 x 450 x 1100	207	-	-
SLC-10-CUBE3+	10 / 9	1 + 0	775 x 450 x 1100	207	-	-
SLC-15-CUBE3+	15 / 13.5	1 + 0	775 x 450 x 1100	209	-	-
SLC-20-CUBE3+	20 / 18	1 + 0	775 x 450 x 1100	235	-	-
SLC-30-CUBE3+	30 / 27	1 + 0	775 x 450 x 1100	319	-	-
SLC-40-CUBE3+	40 / 36	1 + 0	775 x 450 x 1100	417	-	-
SLC-50-CUBE3+	50 / 45	1 + 1	775 x 450 x 1100	185	775 x 450 x 1100	321
SLC-60-CUBE3+	60 / 54	1 + 1	775 x 450 x 1100	185	775 x 450 x 1100	551
SLC-80-CUBE3+	80 / 72	1 + 1	880 x 590 x 1325	265	1050 x 650 x 1325	1020
SLC-100-CUBE3+	100 / 90	1 + 1	880 x 590 x 1325	290	1050 x 650 x 1325	1020
SLC-120-CUBE3+	120 / 108	1 + 1	880 x 590 x 1325	290	1050 x 650 x 1325	1020
SLC-160-CUBE3+	160 / 144	1 + 1	850 x 900 x 1905	540	850 x 1305 x 1905	1655
SLC-200-CUBE3+	200 / 180	1 + 1	850 x 900 x 1905	550	850 x 1305 x 1905	1690

Nomenclature, dimensions and weights for units with input voltage 3 x 400 V, output voltage 3 x 400 V and standard backup time.

Information subject to change without notice.

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