

# STROM P

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Ultimate flexibility to protect mission critical applications

Modular UPS 10 to 40 kVA  
Configurable as 3/3, 3/1 or 1/1

## Scalable UPS architecture and compact footprint

STROM plus from Systrome Power Solutions is a modular on-line (VFI-SS-111) UPS system with a high operating AC/AC efficiency and compact footprint. The STROM<sub>PLUS</sub> UPS system is designed to protect critical data and IT infrastructures with the ultimate on-line power protection.

The STROMplus is based on a 2U high 10 kVA/kW power module that can be housed in one of two frame sizes (20 kVA or 40 kVA) providing up to 40kVA maximum capacity or 30kVA N+1 configurations. Up to 4 frames can be operated in parallel for additional resilience or capacity.

The 20 kVA and 40kVA frames can be installed into a 19 inch cabinet (1000 mm deep and weight dependent). The batteries are housed in a separate battery cabinet.

The Frame Plus provides a self-contained solution. The standard Frame Plus provides space for a 20 kVA or 40kVA frame and internal battery shelves. Longer runtimes can be achieved using external battery cabinets.

STROMplus has one of the lowest Total Cost of Ownership (TCO) factors in its class. The operating efficiency in on-line mode is up to 95% and 98% in Eco Mode. The UPS delivers up to unity-power factor and the system can be configured for 1/1, 3/1 or 3/3 input/output connections at installation.

## STROMplus features

- Up to 95% operating efficiency (on-line mode)
- Up to 98% operating efficiency (Eco Mode)
- 10 kVA 'hot-swappable' Power modules (2U high)
- 20 and 40 kVA UPS frame sizes
- Parallel up to 4 frames for additional resilience
- UPS modules incorporate 'idle mode' and cyclic operation
- Output PF up to unity
- Phase configuration options 1/1, 3/1 and 3/3
- Centralized static and manual bypass lines
- Centralized battery connection
- Built-in 'Intelligent Test Mode'

# Specifications

FRAME MODEL	20	40
Maximum capacity (kVA/kW)	20/20	40/40
Maximum number of power modules connected	2	4
Dimensions W x D x H (mm)	485 x 697 x 398 (7U)	486 x 697 x 575 (11U)
Weight (kg)	42	51
Phase configuration	3/3; 3/1; 1/1	
IP protection degree	IP20	
Color of the frame and modules	RAL 7021	
<b>POWER MODULE</b>		
Parallel capability	Up to 4 frames	
Nominal power (kVA/kW)	10/10	
Dimensions W x D x H (mm)	438 x 590 x 85 (2U)	
Weight (kg)	15.3	
<b>FRAME PLUS (CABINET FOR UPS FRAMES AND BATTERY STRINGS) INPUT</b>		
Dimensions W x D x H (mm)	600 x 1000x1600	
Weight, empty (kg)	120 kg	
<b>INPUT</b>		
Phase	3 or 1 Phase + N + G	
Nominal voltage (V)	3 Phase: 380/400/415 1 Phase: 220/230/240	
Voltage range (V)	304 to 478 V (at full load) 228 to 304 V (with load decreasing linearly)	
Frequency (Hz)	50/60	
Frequency range (Hz)	40/70	
Power factor	> 0.99	
Input THDi	< 3% (with full linear load)	
<b>OUTPUT</b>		
Voltage (V)	3 Phase: 380/400/415 1 Phase: 220/230/240	
Output THDv (according to IEC EN 62040-3)	< 1% (with linear load) < 5.5% (with non linear load)	
Output PF	1	
Crest factor	3:1	
Frequency (Hz)	50/60	
Slew rate (Hz/s)	0.5 (standard); settable from 0.5 to 3	
Overload capacity	110% for 60 min 125% for 10 min 150% for 1 min > 150% for 200 ms	
AC/AC efficiency in double conversion	Up to 95%	
AC/AC efficiency in ECO Mode	Up to 98%	
<b>BATTERY LINE</b>		
Nominal DC voltage (VDC)	± 240 (with +/- connections)	
Quantity of lead acid batteries (12 V each)	40 (settable from 32 to 44)	
Recharge power	10% * System Power (nominal value); Settable: from 0 to 20% * System power	
<b>USER INTERFACE</b>		
Display	7" LCD touch screen (central) display	
Standard communication ports	RS232, RS485, Dry contacts, USB	
Optional communication ports	SNMP, Expansion Dry contact card	
<b>ENVIRONMENTAL</b>		
Operating temperature (°C)	0 to 40	
Storage temperature (°C)	-40 to 70	
Relative humidity	0 to 95%	
Noise at 1 m distance, each power module at 100% of load (dB)	58	
<b>STANDARDS AND CERTIFICATIONS</b>		
Safety	IEC EN 62040-1	
EMC	IEC EN 62040-2	
Test and Performance	IEC EN 62040-3	