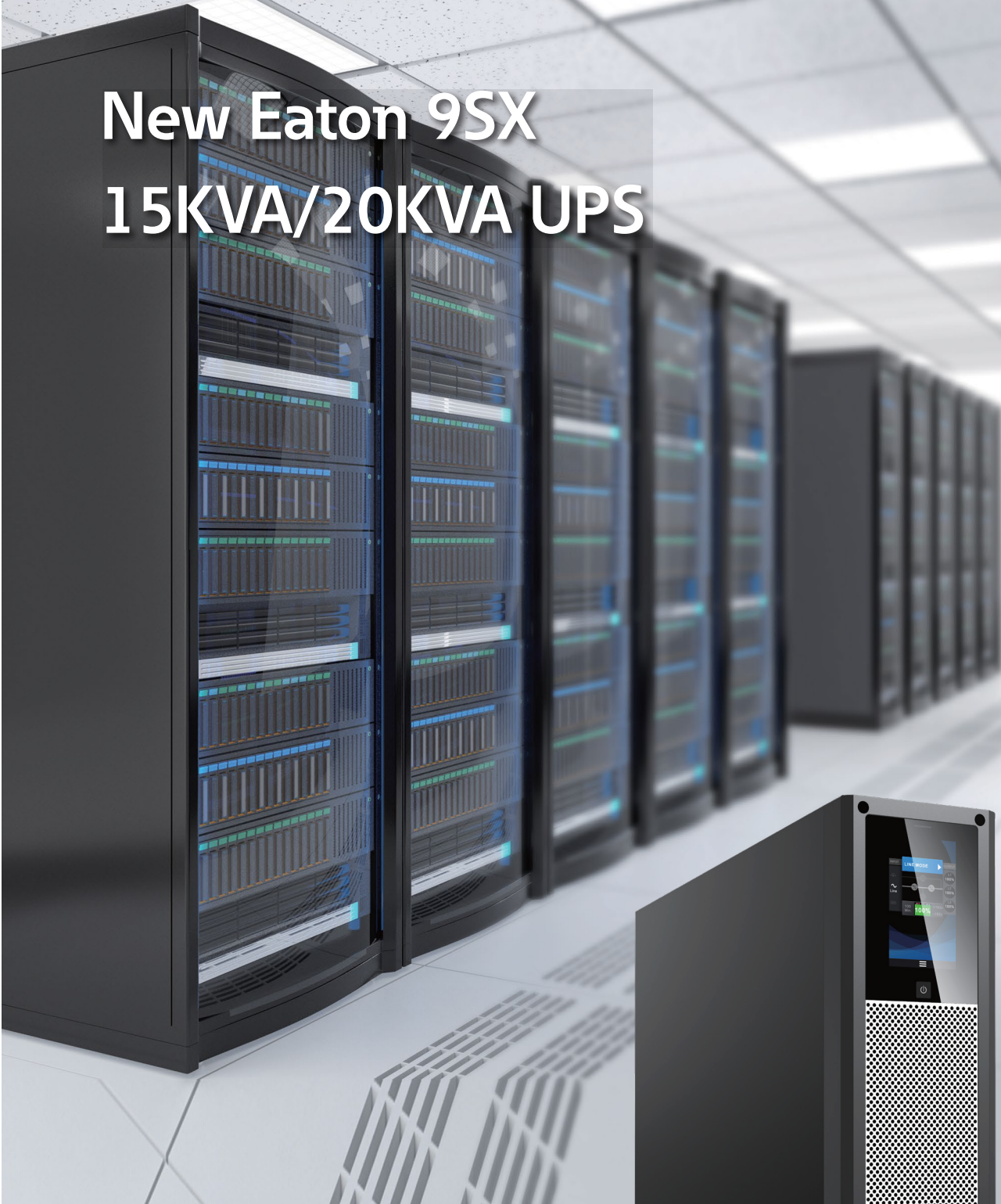# New Eaton 9SX 15KVA/20KVA UPS

EAT•N

Powering Business Worldwide

New Eaton 9SX 15KVA/20KVA UPS

The new Eaton 9SX 15K/20K UPS provides stable power for critical IT infrastructure, Industrial, Manufacturing and Medical devices. With advanced technology to improve the double conversion efficiency and reduce footprint, saving both cost and rack space. Eaton's 9SX product with it's robustness in design for hash environments. or applications outside of a comms rooms.

IT infrastructure (High-density Racks)
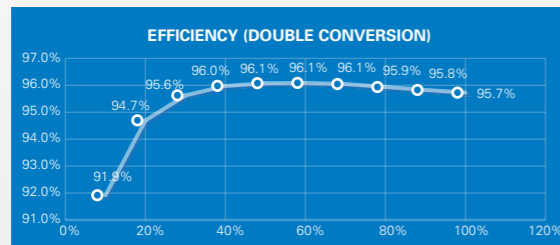
Industrial & Manufacturing
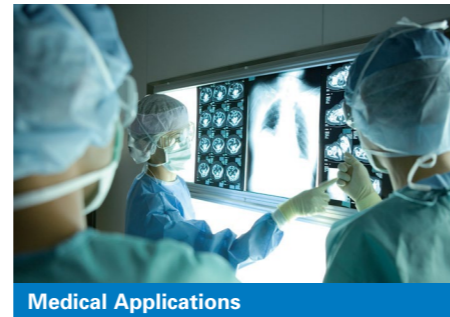
Medical Applications

Key feature

High efficiency

Double conversion efficiency up to 96%.

EFFICIENCY (DOUBLE CONVERSION)

97.0%
96.0%
95.0%
94.0%
93.0%
92.0%
91.0%
0%   20%   40%   60%   80%   100%   120%

91.3%
94.7%
95.6%
96.0% 96.1% 96.1% 96.1% 95.9% 95.8%
95.7%

9SX reduces energy usage & CO2 emissions to help IT Managers save costs on power and cooling.

High power density

- The 15KVA/20KVA power model is only 3U rack space.
- Short depth chassis suitable to be deployed in cabinets as shallow as 800mm deep.
- 438mm width for standard 19" rack mounting.

129mm
589mm
438mm
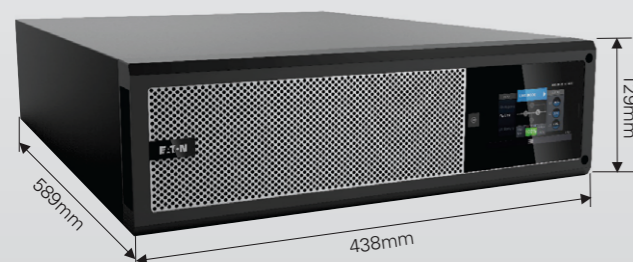
9SX reduces space with same power rating.

High power factor

Unity power factor VA=Watt

Powers more servers than similar UPSs with equivalent VA ratings with lower power factors.

Versatile installation

Can be easily deployed as a rack mount or free standing (tower) unit.

Parallel operation

For redundancy and expanded power rating.

UPS#1 15KW/20KW
UPS#2 15KW/20KW
UPS#3 15KW/20KW

AC IN
AC OUT 45KW/60KW

Maximum parallel 3 models
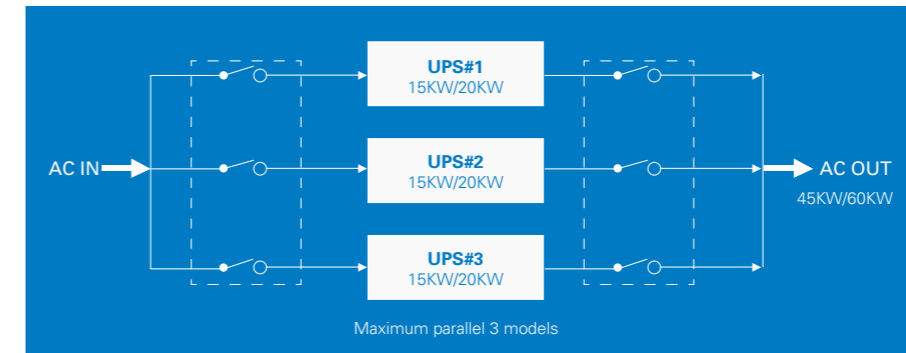
ESS mode

Achieve up to **98.8%** efficiency in ESS mode. System switches to online mode on demand in less than 2ms response time.

Battery management

Eaton's exclusive ABM® technology increases battery service life by 50%. ABM uses an advanced, three-stage charging technique and closely monitors battery health to provide advanced notice when batteries need replacement.

Variable charging current ranges from 0-13A, suitable for recharging larger battery banks.

Endure harsh environment

Operation temperature up to 50 °C.

Maximum operation altitude up to 4000m.

Line mode overload capacity up to 10min at 125% rated load.

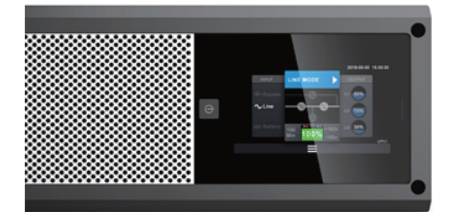### Professional HMI for operation, configuration and setting

Multi connectivity port – RS232, USB, dry in/out, EPO, intelligent slot.

Large coloured touch screen LCD

Built-in gravity sensor that automatically rotates the screen based on UPS deployment orientation.

Intelligent Power Management Software

IPP/IPM compatible with all major OS including virtualization software such as VMware and Hyper-V.

Product accessories

MBP (maintenance bypass model)

Integrated maintenance bypass and load segment.

Load segment control enables prioritized shutdown of nonessential equipment to maximize battery runtime for critical devices.

Paralleled systems require 1 x MBP per UPS module.

MBP20KPARA (Paralleling module) available for ease of deployment of a 2-UPS paralleled system.

EBM

Connect up to 6 pairs (2*6) of EBMs for extended runtime. Minimum deployment is 2 x EBMs per UPS, with increments of 2s.

Connectivity card

Network-M2
Giga bit network card.

INDGW-M2
Giga bit Modbus card.

EMPDT1H1C2
Environmental module. Monitors temperature and humidity.

Technical specifications

UPS power module	9SX15KPM	9SX20KPM
Input		
Rated input voltage	1 phase 220/230/240V; 3 phase 380/400/415V	
Input voltage range	160V~300V full load; 100~160V liner derating	
Rated input frequency	50Hz/60Hz	
Input frequency range	40 Hz– 70 Hz	
Input frequency phase lock range	50Hz system:45 Hz– 55 Hz; 60Hz system:54 Hz – 66 Hz	
System compatibility	TN-S / IT	
Input power factor (PF)	>0.995 both 1 phase and 3 phases	
THDi	≤3% linear load; ≤5% non-linear load	
Output		
Input-output phase connection	Input-output 3-1, 3-3, 1-1	
Rated output voltage	1 phase 220/230/240V; 3 phase 380/400/415V	
Rated output frequency	50Hz/60Hz	
Rated output appearance power	15KVA	20KVA
Rated output active power	15KW	20KW
Max PF	1	
Voltage variation	±1%	
THDV	≤1% linear load; ≤3% non-linear load	
Load crest ratio	≥3:1	
Output connection	Terminal block	
Overload capacity line mode (at rated voltage)	105%<Load≤125%: 10min 125%<Load≤150%: 1min >150% :0.5s	
Battery and charger		
Internal Batteries	None. 2 x EBMs as minimum to provide backup time.	
Max. quantity	6 pairs (2*6)	
Battery voltage	±240V (adjustable to ±　192V, use with correct battery)	
Charging current	0~13A adjust	
Recharging time	3 hours to 90% (2 EBM)	
Efficiency		
Online mode	up to 96%	
ECO or ESS mode	up to 98.8%	
Other working mode		
CVCF(constant voltage and constant frequency)	No derating at 3-3, 3-1 mode; Detaring to 60% at 1-1 mode	
Parallel mode	maximum 3	
Interface		
Display	Coloured touch LCD with gravity sensor	
Connectivity port	RS232 DB9; USB 2.0 type-B; programmable dry contacts in/out; 1 x Mini-Slot for comms cards	

Technical specifications

UPS power module	9SX15KPM	9SX20KPM
Physical dimension		
Dimension (H*W*D)	129mm*438mm*589mm	
Net weight (Kg)	23.7	
Environment		
Operation temperature	0°C ~ 50 °C (0~40 no derating，40°C~ 50°C derating to 50%)	
Storage temperature	-25°C~60°C	
Relative humidity	0 ~ 95%	
Operating altitude	0~4000m (0~1000m no derating, 1000m~4000m the load derating 1 % every up 100m)	
Noise level	≤55dB	
Warranty	2 years	
Certification		
Safety	CE/TLC/RCM	
Energy saving	CQC	
EBM		
Dimension (H*W*D)	129mm*438*589mm	
Net weight (Kg)	124.2	
MBP (maintenance bypass)		
Dimension (H*W*D)	129mm*438*489mm	
Net weight (Kg)	21.5	

Backup time table

EBM quantity	Load	Backup time(Min) - 15kVA	Backup time(Min) - 20kVA
1 group (2*240V EBM)	100%	3.8	2.4
	75%	5.7	3.8
	50%	9.5	9.6
	25%	23.5	24.9
2 group (2*2*240V EBM	100%	13.8	8.5
	75%	20.7	13.8
	50%	35.1	25.4
	25%	91.0	65.6
3 group (3*2*240V EBM)	100%	26.3	17.0
	75%	39.4	26.3
	50%	68.1	42.9
	25%	179.3	98.7
4 group (4*2*240V EBM)	100%	39.8	25.1
	75%	59.6	39.8
	50%	104.3	67.2
	25%	277.8	133.0

Part number

Model	9SX15K	9SX20K
Product description	**Part number**	
UPS power module for ANZ	9SX15KPMAU	9SX20KPMAU
External battery module 480V	9SXEBM480RT6U (contains 2 x (240V, 3RU) modules each)	
MBP simple version	MBP20K	
MBP standard version	MBP20KPDU	
MBP 1+1 parallel version	MBP20KPARA	
New network card	Network-M2	
Modbus card	INDGW-M2	
Environment detection card	EMPDT1H1C2	

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