



## UPS-MAK SERIES ONLINE 20 kVA Single Phase UPS

<http://www.mak-powersis.de/20kva-single-phase-ups.html>

<b>POWER</b>	Power VA	20 kVA
	Power W	16 kW

<b>INPUT</b>	Voltage	220 / 230 Vac 1ph+N
	Voltage tolerance	-% 25 / +%20 (without downgrading)
	Frequency	50 / 60 Hz (Auto detect)
	Frequency tolerance	+/- 10 %
	Power factor	>0.99
	THDi	+/- %5

<b>OUTPUT</b>	Voltage	220 / 230 Vac 1ph+N
	Voltage tolerance	+/-1 (static load) dynamic load in accordance with VFI-SS-11
	Current	86
	Frequency	+/- 10 %
	Frequency tolerance	+/- %0.1 (self-synchronize) +/- %1 (mains synchronize)
	Power factor	0.7
	THDi	<%2 (linear load), <%5 (Nonlinear load)
	Crest factor	03:01:00

<b>OVERLOAD CAPACITY</b>	%110	30 Min.
	%125	10 Min.
	%150	1 Min.
	>%150	10 Sec.

<b>EFFICIENCY</b>	Online	Up to %94
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<b>GENERAL</b>	Technology	Three level inverter PFC
	Control	Mikroprocessor SPWM
	Communication	SNMP (optional) RS232
	Remote monitoring	SNMP view, UPSilon, Remote monitoring panel (optional)
	Dry contacts	Battery mode, Battery low
	Custom inputs	Remote EPO
	Cold start	Standard
	Maintenance Bypass	Standard

<b>ENVIRONMENT</b>	Operating temperature	from 0 °C up to +40 °C (from 20 °C to 25 °C for maximum battery life)
	Relative humidity	%0 -%85 (without condensation)
	Maximum altitude	>2000 m.
	Noise level	<55 dB(A)

## 20 kVA UPS

<b>UPS CABINET</b>	Dimension WxDxH (mm)	255 x 730 x 870
	Weight (kg)	51
	Degree of protection	IP 20
	Colour	RAL 7012
<b>BATTERY</b>	Internal battery quantity	30
	Internal battery capacity(Ah)	7 – 9
	Eternal battery cabinet socked	Standard
<b>STANDARDS</b>	Safety	EN 62040-1
	EMC	EN 62040-2
<b>UPS LIFE TIME</b>	10 Years	