

Omni 25-300kVA

Series Specification

Specification table for Omni Series, modular UPS systems 25-300kVA

For models:

OMNPM25

OMNPM50

OMNCAB050

OMNCAB150

OMNCAB300

Tech Support

Need help? Our UK-based experts are available 9am–5pm, Monday to Friday.

Email: hello@neotec.co.uk **Website:** www.neotec.co.uk

	OMNPM25 (2 MODULE)	OMNPM25 (6 MODULE)	OMNPM50
POWER RATING			
kVA/kWatt	50kVA/kW	150kVA/kW	300kVA/kW
EFFICIENCY			
Normal mode (dual conversion)	97%		
ECO mode	99%		
Battery mode	94.5%	96%	
GENERAL			
Acoustic noise level at 1 meter	65dB @ 100% load, 62dB @ 45% load		61dB (power module)
Altitude of operation	≤3000m above sea level, derate power by 2% per 100m between 3000m and 4000m		
Relative humidity	0 to 95%, non-condensation		
Operating temperature	0-40°C, battery life is halved for every 10°C increase above 20°C		0-40°C, battery life is halved for every 5°C increase above 25°C
UPS storage temperature	-25~70°C		-20~70°C
Recommended battery storage temperature	-20~30°C (20°C for optimum battery storage)		0~25°C (20°C for optimum battery storage)
CABINET: PHYSICAL ATTRIBUTES			
Dimensions: W x D x H (mm)	442x711x307	442x840x976	600x750x2000
Weight (kg)	39	88	220
IP protection level	IP20		
Colour	Black		
MODULE: PHYSICAL ATTRIBUTES			
Dimensions: W x D x H (mm)	400×495×86(2U)		440*475*140
Weight (kg)	14		23
Colour	Black (Front)		
INPUT RECTIFIER			
Rated AC input voltage	380/400/415Vac (three-phase and sharing neutral with the bypass input) 220/230/240Vac (single-phase and sharing neutral with the bypass input)		380/400/415Vac (three-phase and sharing neutral with the bypass input)
Input voltage range	Power module 25kVA: 304~478Vac (L-L), 100% load; 304~228 (L-L) power derate from 100% to 50%		-40%~+25%
Frequency	50/60Hz (range: 40Hz~70Hz)		
Power factor	0.99		
THDI	<2% (100% linear load)		2%

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BATTERY			
Battery bus voltage	Mod 25kVA: ±240V		Nominal: ±240V
Quantity of lead-acid cells	480V=40*6 cell (12V) (Selectable 30-50pcs, derates @ 34 blocks and under)		
Float charge voltage	2.25V/cell (selectable from 2.2V/cell~2.35V/cell) Constant current and constant voltage charge mode		
Temperature compensation	-3.0mV/°C/cl (selectable from: 0~-5.0, 25°C or 30°C, or inhibit)		
Ripple voltage	≤1% V float		
Ripple current	≤5% C ₁₀		
Boost voltage	2.4V/cell (selectable from: 2.30V/cell~2.45V/cell) Constant current and constant voltage charge mode		
End of discharge voltage	1.65V/cell (selectable from: 1.60V/cell~1.750V/cell) at 0.6C discharge current 1.75V/cell (selectable from: 1.65V/cell~1.8V/cell) at 0.15C discharge current (EOD voltage changes linearly within the set range according to discharge current)		
Battery charge	50%* UPS capacity (selectable from: 0~50%* UPS capacity)		10%* UPS capacity (selectable from: 1~20%* UPS capacity)
INVERTER			
Rated AC voltage	380/400/415Vac (three-phase four-wire and sharing neutral with the bypass) 220/230/240Vac (single-phase and sharing neutral with the bypass input)		380/400/415Vac (three-phase four-wire and sharing neutral with the bypass)
Frequency	50/60Hz		
Overload	110%, 60min; 125%, 10min; 150%, 1min; >150%, 200ms		
Fault current	300% short current limitation for 200ms		
Non-linear load capability	100%		
Neutral current capability	170%		
Steady state voltage stability	±1% (balanced load), ±1.5% (100% unbalance load)		
Transient voltage response	±5%		
THD	<1% (linear load), <5% (non-linear load)		<1% (linear load), <3% (non-linear load)
Synchronisation window	Rated frequency ±2Hz (selectable: ±1~±5Hz)		
Max charge rate of synch frequency	1Hz/s (selectable: 0.1~5Hz/s)		
Inverter voltage range	±5%Vac		

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BYPASS			
RATED CAPACITY BYPASS	50kVA	150kVA	300kVA
Rated AC voltage	380/400/415Vac (L-L); 220/230/240Vac (L-N) (three-phase four-wire, sharing neutral with the rectifier input and providing neutral reference for the output)		380/400/415Vac (three-phase four-wire, sharing neutral with the rectifier input and providing neutral reference for the output)
Rated current	76A	227A	456A
Overload	<110% long term; <125% for 10mins; <150% for 1min		
Current rating of neutral cable	1.7A×In		
Frequency	50/60Hz		
Switch time (between bypass and inverter)	Synchronized switch: 0ms		
Bypass voltage tolerance (%Vac)	Upper limit: +10, +15, +20, +25, default: +15; Lower limit: -10, -20, -30 or -40, default: -20		
Bypass frequency tolerance	±1%, ±3%, ±5% settable		±2.5%, ±5%, ±10% or ±20%, default: ±10%