### SmartZone™ UPS 5-10kVA VRLA



#### overview

The Panduit® SmartZone™ UPS with maintenance free VRLA battery, 5-10kVA single phase 208 V and 230 V units is a pure Online Double Conversion system that delivers highly efficient and reliable power protection and power backup for your computer IT equipment. With excellent electrical performance, enhanced intelligent monitoring and network functions, complying with ENERGY STAR® 2.0, EMC and safety standards to meet the continually growing power demands of Data Center, Enterprise and Edge IT Infrastructure.



### key features and benefits

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Rack/Tower convertible	Supports rack/tower installation with rotatable colorful touchscreen LCD panel	
Online Double Conversion with fully digital control (EMEA unit only)	Provides stable and clean power with less ripple by filtering noise, automatic voltage regulation (AVR) and surge protection	
Wide input voltage range	110-280Vac covering extended voltage range, applicable for severe situation such as large power grid fluctuation	
High efficiency	Up to 98%, reducing the energy waste and the cost of electricity	
Energy savings	High Efficiency on Smart ECO mode for Online Double Conversion models	
Green design	RoHS and Reach, CE/UL/ENERGY STAR® 2.0 compliant for North America units	
Output unity power factor	Means more active power for IT equipment load	
Input power factor	Power factor correction topology on the input side dramatically reducing the total harmonic distortion (THD)	
Expandable battery packs	Allows to connect maximum five external battery packs, extending the UPS backup running time	
Intelligent Battery Management	Three-stage battery charging method matching the most optimal curve and temperature-compensated with advanced algorithms prolonging the battery life	
EPO function (Emergency Power Off)	Allows to quickly and easily shut down the UPS when emergency event occurs	
Generator compatible	Wide input frequency and voltage, supports connecting to generators, ensuring the uninterruptible operation	
Hot-Swappable battery design	Can perform the replacement of battery cartridge without powering down the UPS	
Cold start function	Allows to boot up the ups without mains input but with batteries	
Intelligent fan speed regulation	Automatically adjustment of fan speed due to the ambient temperature and load percentage	
Multiple communication interface	RS232/USB/intelligent slot, realizing communication and monitoring function	
Comprehensive protection function	Short-circuit, overload, overheat, battery overcharge and over discharge, output low voltage, fan fault alarm and RJ45 surge protection	
Programmable outlet group with Smart Load Shedding	Loads connected to the programmable group can lose power first, saving more energy and extending the runtime for critical load. Smart Load Shed allows logical group shutdown with time or load.	
Touch-Screen colorful LCD	Colorful LCD with cold start button and LED indicators, providing intuitive display	
Intelligent Network Management Card (included with N Models*)	Provides harden security remote access via Ethernet Secure SNMPv3 protocol to monitor and manage the UPS, micro-USB for firmware upgrade and RS-485 for connecting environmental and security sensors. Built-in WiFi and Bluetooth hardware support with future optional firmware upgrade.	
SmartZone™ Cloud Ready (included with N Models*)	Support for technology allowing to easily, securely and quickly connect to SmartZone™ Cloud DCIM with management, monitoring, control and alerting of Power Chain, Environmental, Cooling, Security, Asset, and Connectivity Infrastructure Assets.	
SmartZone <sup>™</sup> mPower Management Software	Configure, monitor, and manage the UPS (includes graceful equipment shutdown) remotely via RS-232 or USB or Ethernet. Software is available for free download from www.panduit.com/smartzone-ups.	

<sup>\*</sup> N Model UPS has an N in the 4th digit of the part number, e.g. U05N11V

# product specifications • 6-10kVA 230 V VRLA

MODEL		U06S12V/U06N12V	U10S12V/U10N12V	
Output power capacity		6000 VA	10000 VA	
Max Configurable Power (Watts)		6000 W	10000 W	
Nominal output voltage		230 Vac (220 Vac, 2		
Output Linear load		<3%		
voltage ————————————————————————————————————		<5%		
Output	Online mode	50 / 60 ± 4 Hz		
frequency	Battery mode	50 / 60 ± 0.1 Hz		
Output power fac	otor	1		
Load crest factor	•	3:1		
Topology		Double Conve	ersion Online	
Waveform		Pure Sin	ne Wave	
Overload	Online mode	105% - 125%: 5 min; 125% - 130%: 1 m	nin; > 130%: 200 ms, transfer to bypass	
capability	Battery mode	105% - 125%: 1 min; 125% - 130%	: 30 s; > 130%: 200 ms, shut down	
Transfer time	Online mode <-> Battery mode	0 ms		
(typical)	Inverter <-> Bypass	0 ms		
Efficiency	Online mode	94.0%	95.0%	
Efficiency	ECO mode	97.5%	98.0%	
Output	Programmable	(2) IEC C19; (2) IEC C13		
connection	Non-programmable	HW terminal (L+N+G)		
Bypass		Internal		
INPUT				
Nominal input vo	ltage	230 Vac (220 Vac, 240 Vac selectable)		
Input voltage	Full load	176 - 264 Vac		
range	Half load	110 - 285 Vac		
Input frequency r	range	40 - 70 Hz (auto sensing)		
Input connection		HW terminal (L+N+G)		
Input power factor	or	>0.99 (full load)		
BATTERY				
Battery type		VRLA		
Typical recharge time		4-6 hrs.		
Battery voltage		240 Vdc		
Battery quantity × capacity		20 × 12 V / 9 Ah		
Charging current (max.)		10 A		
Backup time	Full load	9.7 min.	4.5 min.	
	Half load	25.3 min.	12.9 min.	
Expected Battery Life (years)		3-5 yrs.		
EBP Replacement Cartridge		UVD240		
Additional External Battery Pack (EBP)		UVP240		
Maximum External Battery Pack (EBP) quantity		5 units		

6-10kVA 230 V VRLA (continued)

Communication ports	,	intelligent slot		
Pre-Installed SmartZone™ iNMC Card	N model only			
Local Display/Control Panel	3.5 inch colorful touch screen			
Audible Alarm	Yes			
Emergency Power Off (EPO)	Yes			
ENVIRONMENTAL				
Operating temperature	32°F - 104°F (0°C -	40°C) (no derating)		
Storage temperature	-25°C - 55°C (w	ithout batteries)		
Relative humidity	0 - 95% (non-condensing)			
Operating elevation	Up to 3000 m (derated 10%)			
Online thermal dissipation	1306 BTU/hr.	1795 BTU/hr.		
Protection Class	IP20			
Noise level	<55dB at 1 m	<58dB at 1 m		
CONFORMANCE				
Safety	CB: IEC62040-1:2013, CE-LVD: EN62040-1:2008+A1:2013, UKCA: BS62040-1-2013			
EMC	IEC 62040-2-2016, EN 62040-2-2018, BS62040-2-2018			
Transportation	ISTA Procedure ISTA Procedure 2B			
Surge protection	IEEE/ANSI C62, 41 Category A, Level 3; 600Joules			
CUSTOMER SERVICE	CUSTOMER SERVICE			
Warranty	3 years for UPS & EBP, 2 years for battery			
SUSTAINABLE OFFER STATUS				
RoHS	Compliant			
Proposition 65 Warning	See Safety Sheet (IM053)			
PHYSICAL				
Maximum Height	131mm UPS + 131mm Battery			
Maximum Width	440mm UPS + 440mm Battery			
Maximum Depth	666mm UPS + 666mm Battery			
Rack Height	6 RU			
Net Weight	101kg	103kg		
Shipping Weight	116kg	118kg		
Shipping Height	280mm UPS + 280mm Battery + 144mm Pallet			
Shipping Width	565mm (22.2 in.)			
Shipping Depth	865mm Pallet			
Color	Black			

### 5-10kVA 208 V VRLA

MODEL		U05S11V / U05N11V	U06S11V / U06N11V	U10S11V / U10N11V	
Output power ca	apacity	5000 VA	6000 VA	10000 VA	
Max Configurable Power (Watts)		5000 W	6000 W	10000 W	
Nominal output voltage		208 Vac (240 Vac selectable)			
Output Linear load voltage Non linear load		<3%			
		<5%			
Output	Online mode	50 / 60 ± 4 Hz			
frequency Battery mode		50 / 60 ± 0.1 Hz			
Output power fa	ctor	1			
Load crest facto	r	3:1			
Topology			Double Conversion Online		
Waveform			Pure Sine Wave		
Overload	Online mode	105% - 125%: 5 min; 1	125% - 130%: 1 min; > 130%: 20	0 ms, transfer to bypass	
capability	Battery mode	105% - 125%: 1 n	nin; 125% - 130%: 30 s; > 130%:	200 ms, shut down	
Transfer time	Online mode <-> Battery mode	0 ms			
(typical)	Inverter <-> Bypass	0 ms			
Efficiency	Online mode	93.5%	94.0%	95.0%	
Efficiency	ECO mode	97.0%	97.5%	98.0%	
Output	Programmable	(2)L6-30R			
connection Non-programmable		(2) NEMA L6-30R HW terminal (L1+L2+G)			
Bypass			Internal		
INPUT					
Nominal input vo	oltage	208 Vac (240 Vac selectable)			
Input voltage	Full load		185 - 264 Vac		
range	Half load		110 - 285 Vac		
Input frequency range		40 - 70 Hz (auto sensing)			
Input connection		NEMA L6-30R HW terminal (L1+L2+G)			
Input power factor			>0.99 (full load)		
BATTERY					
Battery type		VRLA			
Typical recharge	e time	4-6 hrs.			
Battery voltage		240 Vdc			
Battery quantity × capacity		20 × 12 V / 9 Ah			
Charging current (max.)			10 A		
Backup time	Full load	14.5 min.	9.7 min.	4.5 min.	
	Half load	37.1 min.	25.3 min.	12.9 min.	
Expected Battery Life (years)		3-5 yrs.			
EBP Replaceme	nt Cartridge	UVD240			
Additional External Battery Pack (EBP)		UVP240			
Maximum External Battery Pack (EBP) quantity		5 units			

5-10kVA 208 V VRLA (continued)

COMMUNICATION & MANAGEMENT	oontinaca,			
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Communication ports	USB, RS232, intelligent slot			
Pre-Installed SmartZone™ iNMC Card	N model only			
Local Display/Control Panel	3.5 inch colorful touch screen			
Audible Alarm	Yes			
Emergency Power Off (EPO)		Y	es	
ENVIRONMENTAL				
Operating temperature	32°F - 104°F (0°C - 40°C) (no derating)			ring)
Storage temperature		-25°C - 55°C (w	ithout batteries)	
Relative humidity		0 - 95% (non	-condensing)	
Operating elevation	Up to 3000 m (derated 10%)			
Online thermal dissipation	1067 BTU/hr. 1423 BTU/hr.		U/hr.	1985 BTU/hr.
Protection Class	IP20			
Noise level	<55dB at 1 m		<	:58dB at 1 m
CONFORMANCE				
Energy Saving	ENERGY STAR® 2.0			
Safety	cULus: UL 1778 5th Edition, CSA C22.2 NO.107.3-14			
FCC	FCC Part 15 Subpart B Class A, ANSI C63.4-2014			
Transportation	ISTA Procedure 2B			
Surge protection	IEEE/ANSI C62, 41 Category A, Level 3; 600Joules			
CUSTOMER SERVICE				
Warranty	3 years for UPS & EBP, 2 years for battery			
SUSTAINABLE OFFER STATUS				
Proposition 65 Warning	See Safety Sheet (IM053)			
PHYSICAL				
Maximum Height	131mm UPS + 131mm Battery			
Maximum Width	440mm UPS + 440mm Battery			
Maximum Depth	666mm UPS + 666mm Battery			
Rack Height	6 RU			
Net Weight	85kg			87kg
Shipping Weight	101kg			103kg
Shipping Height	280mm UPS + 280mm Battery + 144mm Pallet			
Shipping Width	595mm Pallet			
Shipping Depth	865mm Pallet			
Color	Black			

EBP specifications

MODEL	UVP240		
MATCHED UPS	U05S11V / U06S11V / U10S11V / U06S12V / U10S12V		
	U05N11V / U06N11V / U10N11V / U06N12V / U10N12V		
BATTERY SYSTEM			
Battery type	VRLA (lead acid maintenance free battery)		
Typical battery life	3 - 5 years, depend on discharging cycle and ambient temperature		
System voltage	±240 Vdc		
Battery quantity	20 pcs.		
Battery capacity	12 V/9 Ah		
Replacement Cartridge Set	UVD240		
PHYSICAL			
Dimension W × D × H	440 × 666.5 × 131mm		
Net Weight	67.5kg		
Maximum Height	13mm		
Maximum Width	440mm		
Maximum Depth	666mm		
Rack Height	3 RU		
Net Weight	67.5g		
Shipping Weight	75kg		
Shipping Height	280mm Battery + 144mm Pallet		
Shipping Width	595mm Pallet		
Shipping Depth	865mm Pallet		
ENVIRONMENTAL			
Operating temperature	0°C - 40°C		
Relative humidity	0 - 95% (non-condensing)		
CONFORMANCE			
Safety	cULus: UL 1778 5th Edition, CSA C22.2 NO.107.3-14		
Transportation	ISTA Procedure 2B		

#### **UPS** accessories

URC005	Relay card (MiniAS400) (12 V) (for 1 to 10kVA single phase UPS units)	
UNCP01	Panduit® Intelligent Network Management Card (iNMC)	
	See iNMC specs for more details	
UTOWFT	Tower stabilizer brackets	
URMKIT2	Rack mount rail kit for 5-10kVA UPS and EBP	

#### U06N12V / U10N12V (Rear)



#### U05N11V (Rear)



### U06N11V / U10N11V (Rear)



### UVP240 (Rear)



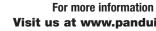
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