# Z20 SERIES Z20I3KD/3K6D/4K2D/5KD

#### Efficiency

Maximum efficiency up to 97.8%.
European efficiency up to 97.4%.
MPPT efficiency over 99.5%.
THDi less than 1%.

#### Safety

- 4 Up to 10 safety protection functions.4 IP65 Protection (indoor and outdoor use).
- ↓ 45°C full-load output.
- Wide MPPT voltage range.

#### **Features**

4 Lighter than similar products and optimized volume.
4 Multiple monitoring and communication options.
4 Fanless low-noise design.



## **High Efficiency**

Zeus Appollo Z20I3KD/3K6D/4K2D/5KD inverter series is designed under modern industrial design concept. It is widely and flexibly used in residential rooftop units because of its wide range of voltage and current inputs. It features very high conversion efficiency and reliability. This series provides long-term and stable generating benefits. The powerful, intelligent, user friendly interface and smart design makes it most suitable for residential applications.

## **Technical data** Z20I3KD/3K6D

ZEUS APPOLLO

	Z20I3KD	Z20I3K6D	
DC Input Data			
Max.recommended DC power[W]	3990	4788	
Max.DC voltage [V]	600	600	
Max. input current [A]	11/11	11/11	
MPPT Voltage Range [V]	80~550	80~550	
Min.DC voltage/Start-up voltage [V]	120	120	
No. of inputs/MPP trackers	2/2	2/2	
DC connector	Amphenol H4/MC4/Devalan(optional)		
Output (AC)			
Nominal AC power [W]	3000	3680	
Max. AC power [W]	3000	3680	
Nominal AC voltage; range [V]		180~270	
AC grid frequency; range [Hz]		5~55/55~65	
Max.AC current [A]	13.6	16	
Power factor	0.8 leading~0.8 lagging		
Total harmonic distortion(THD)	<	:3%	
Efficiency			
MPPT efficiency	99	9.9%	
European efficiency	>97.5%		
Max. efficiency	9	7.8%	
Safety Equipment			
Residual current monitoring unit	Integrated		
DC switch	Optional		
Islanding protection	Integrated		
Grid monitoring	VDE-AR-N4105, AS4777.2&3,RD1699,IEC62109-2/1,VDE0126-1-1+A1, EN50438,G83/G59		
Reference Standard	Reference Standard		
EMC standard	EN 61000-6-1, EN61000-6-2, EN61000-6-3,EN61000-6-4, EN61000-3-11, EN61000-3-12		
Safety standard	IEC62109-1&-2, AS3100		
Environment			
IP protection	IP65		
Operating Temperature Range	-25 to 60°C ( up 45 derating)		
Relative humidity	0~95%		
Altitude [m]	4000m (up 3000m derating)		
Noise emission(typical) [dB]	<25		
General Data			
Dimensioins(W×H×D)[mm]	347×432×145mm		
Weight [kg]	14		
Housing	For outdoor and indoor		
Mounting information	Wall mounting		
Тороlоду	Transformerless		
Cooling concept	Natural convection		
Display	LCD		
Communication interfaces	USB2.0; RS485(standard) Wi-Fi(optional)		
Standard warranty [years]	5 (10 optional)		

## **Technical data** Z20I4K2D/5KD



	Z20I4K2D	Z2015KD	
DC Input Data			
Max.recommended DC power[W]	5586	6650	
Max.DC voltage [V]	600	600	
Max. input current [A]	11/11	11/11	
MPPT Voltage Range [V]	80~550	80~550	
Min.DC voltage/Start-up voltage [V]	120	120	
No. of inputs/MPP trackers	2/2	2/2	
DC connector	Amphenol H4/MC4/Devalan(optional)		
Output (AC)			
Nominal AC power [W]	4200	5000 (4999*)	
Max. AC power [W]	4200	5000 (4999*)	
Nominal AC voltage; range [V]	230;	180~270	
AC grid frequency; range [Hz]	50/60; 4	5~55/55~65	
Max.AC current [A]	19	22.8 (21.7*)	
Power factor	0.8 leadir	ng~0.8 lagging	
Total harmonic distortion(THD)	<3%	<3%	
Efficiency			
MPPT efficiency	99.9%	99.9%	
European efficiency	>97.5%	>97.5%	
Max. efficiency	97.8%	97.8%	
Safety Equipment			
Residual current monitoring unit	Integrated		
DC switch	Optional		
Islanding protection	Integrated		
Grid monitoring	VDE-AR-N4105, AS4777.2&3,RD1699,IEC62109-2/1,VDE0126-1-1+A1, EN50438,G83/G59		
Reference Standard			
EMC standard	EN 61000 6 1 EN61000 6 2 EN61000 6 2 EN61000 6 4 EN61000 2 11 EN61000 2 12		
Safety standard	EN 61000-6-1, EN61000-6-2, EN61000-6-3,EN61000-6-4, EN61000-3-11, EN61000-3-12 IEC62109-1&-2, AS3100		
	12C02105-1&-2, A35100		
Environment IP protection			
Operating Temperature Range	IP65 -25 to 60℃ ( up 45 derating)		
Relative humidity	-25 to 60 C ( up 45 derating) 0~95%		
Altitude [m]	4000m (up 3000m derating)		
Noise emission(typical) [dB]	<25		
		~23	
General Data	2.47.46	10.114F an ar	
Dimensioins(W×H×D)[mm]	347×432×145mm		
Weight [kg]	14		
Housing Mounting information	For outdoor and indoor		
Mounting information	Wall mounting		
Topology Cooling concent	Transformerless		
Cooling concept	Natural convection		
Display Communication interfaces	LCD		
	USB2.0; RS485(standard) Wi-Fi(optional) 5 (10 optional)		
Standard warranty [years]			

Note(s):\*4999 and 21.7A for Australia.