

POWER
MINI

SISTEMA STORAGE RETROFIT OUTDOOR ZCB CABINET+ INVERTER IBRIDO TRIFASE



Industrial



NEW

THREE-PHASE HYBRID INVERTER 3PH HYD 30000 ZSR-L / 40000 - 50000 - 60000 ZSR

- Up to 200% photovoltaic oversizing.
- 40 A per MPPT, suitable for high-power photovoltaic modules.
- Supports up to 100% three-phase unbalanced load.
- Prepared for connection with a diesel generator or smart load output
- Integrated Type I + II DC SPD and Type II AC SPD.
- IP66 protection rating.



Industrial



ZCB CABINET 64 / 80 / 96 KWH

- Modular and scalable solution.
- Pre-assembled shipment for easy and safe installation.
- Dual fire protection system.
- Active balancing for modules and cabinet.
- Up to 4 cabinets can be connected in parallel.
- Hybrid inverter connection possible up to 100 m distance



Industrial



TECHNICAL DATA	3PH HYD 30000 ZSR-L	3PH HYD 40000 ZSR	3PH HYD 50000 ZSR	3PH HYD 60000 ZSR
PV Input (Photovoltaic)				
Recommended maximum PV power	60 kWp	80 kWp	100 kWp	120 kWp
Maximum DC power per MPPT	30kW (750 – 910 V)			
Maximum input voltage	1000 V			
Start-up voltage	200 V			
Rated input voltage	600 V			
MPPT voltage range	160-950 V			
DC voltage at full load	340 - 950 V	310 - 950 V	340 - 950 V	380 - 950 V
Number of MPPTs	3		4	
Maximum number of input strings per MPPT	2/2/2		2/2/2/2	
Maximum input current	40/40/40 A		40/40/40/40 A	
Maximum absolute input current	50/50/50 A		50/50/50/50 A	
Battery				
Voltage range	600-1000 Vd.c.			
Number of battery input channels	1			
Maximum charging power	30 kW		60 kW	
Maximum discharging power	30 kW	40 kW	50 kW	60 kW
Maximum charging current	50 A		100 A	
Maximum discharging current	50 A	64 A	80 A	100 A
Compatible battery type	LFP (supplied by Zucchetti)			
Depth of Discharge (DoD)	90%			
BMS communication	CAN			
AC Backup connection (EPS emergency power supply)				
Rated output voltage	3 / N / PE, 380/400/415 V			
Rated output frequency	50/60 Hz			
Maximum output power	30 kW	40 kW	50 kW	60 kW
Rated output current	45.6/43.3/41.7 A	60.8/57.7/55.6 A	76.0/72.2/69.6 A	91.2/86.6/83.5 A
Rated apparent power	30 kVA	40 kVA	50 kVA	60 kVA
Maximum apparent power	33 kVA	44 kVA	55 kVA	66 kVA
Maximum output current	50.0/47.6/45.9 A	66.9/63.5/61.2 A	83.6/79.4/76.5 A	100/95.3/91.8 A
Peak apparent output power	1.5 times the nominal power, 10 seconds			
Harmonic distortion	<3%			
Switching time [1]	4 ms			
Unbalanced load support	Yes, it supports 100% unbalanced three-phase load.			
AC generator connection				
Rated input voltage	3 / N / PE, 380/400/415 V			
Rated input frequency	50/60 Hz			
Rated input power	30 kW	40 kW	50 kW	60 kW
Rated input current	45.6/43.3/41.7 A	60.8/57.7/55.6 A	76.0/72.2/69.6 A	91.2/86.6/83.5 A
Rated apparent power	30 kVA	40 kVA	50 kVA	60 kVA
Maximum apparent power	33 kVA	44 kVA	55 kVA	66 kVA
Maximum output current	50.0/47.6/45.9 A	66.9/63.5/61.2 A	83.6/79.4/76.5 A	100/95.3/91.8 A
AC grid connection				
Rated voltage	3 / N / PE, 380/400/415 V			
Rated frequency	50/60 Hz			
Maximum output power	30 kW	40 kW	50 kW	60 kW
Rated output current	45.6/43.3/41.7 A	60.8/57.7/55.6 A	76.0/72.2/69.6 A	91.2/86.6/83.5 A
Rated apparent power	30 kVA	40 kVA	50 kVA	60 kVA
Maximum apparent power	33 kVA	44 kVA	55 kVA	66 kVA
Maximum output current	50.0/47.6/45.9 A	66.9/63.5/61.2 A	83.6/79.4/76.5 A	100/95.3/91.8 A
Maximum input current	80 A		100 A	
Harmonic distortion	<3%			
Power factor	1 default (programmabile +/- 0,8)			
Efficiency				
Maximum MPPT efficiency	99,9%			
Maximum efficiency	98,2%			
European efficiency	97,5%			
Maximum charge/discharge efficiency[2]	98,2%			
Protection				
DC switch, PV reverse connection protection, protection Reverse Battery Connection Protection, Output Short-Circuit Protection, Output Overcurrent Protection, Output Overvoltage Protection				Si
Insulation Impedance Detection				Yes
Residual current detection				Yes
Anti-islanding protection				Yes
Overvoltage protection [3]	PV: Tipo I+II, AC: Tipo II			
General Parameters				
Inverter topology	Senza trasformatore, non isolato			
Protection class	Class I			
IP protection rating	IP66			
Overvoltage category	AC III, DC II			
Operating temperature range	Form -30° C o + 60° C (derating above +45° C)			
Relative humidity range	5%-95%			
Maximum operating altitude	4000 m (derating above 2000 m)			
Standby self-consumption [4]	<10 W		<15 W	
Installation method	Wall-mounted installation			
Dimensions (W x H x D)	680x525x325 mm		850x660x305 mm	
Cooling method	Forced convection			
Weight	40 kg		75 kg	
Communication	RS485, Optional: WiFi / 4G / LAN			
Display	LCD & APP			

TECHNICAL DATA	CABINET ZCB 64 KWH	CABINET ZCB 80 KWH	CABINET ZCB 96 KWH
Battery			
Tipo di batteria		LiFePO4	
Nominal capacity		314 Ah	
Maximum charging current		150 A	
Maximum discharging current		200 A	
Battery pack configuration		1P16S	
Rated voltage		600 Vd.c	
Number of battery packs	4 packs/cabinet	5 packs/cabinet	6 packs/cabinet
Total battery energy[1]	64.31 kWh	80.38 kWh	96.46 kWh
Rated power	30,72 kW	38,40 kW	46,08 kW
Maximum depth of discharge		90%	
System			
Protection class		Class I	
IP protection rating		IP55	
Corrosion protection grade		C4	
Operating temperature range[2]		Da -20° C a + 50° C (derating above 45° C)	
Relative humidity range		5%-95%	
Maximum operating altitude[3]		3000m	
Installation		Floor-mounted installation	
Communication		CAN	
Thermal management mode		Automatic airflow management	
Air conditioning power		1,5 kW (cooling), 1 kW (heating)	
Noise level		65 dB (tipico)	
Fire protection		Aerogel	
Dimensions (WxHxD)		750x2100x1150 mm (±20mm)	
Weight	< 1100 kg	< 1220 kg	< 1340 kg
Optional accessories [4]			
ZZT-POWER-MINI-KIT	Inverter wall-mounting kit on battery cabinet: cabling, cable ducts, solar radiation protection, ...		
ZZT-POWER-MINI-KIT-20M	Battery installation kit at 20 meters from the inverter: cabling.		
ZZT-POWER-MINI-KIT-100M	Battery installation kit at 100 meters from the inverter: cabling.		
ZZT-BASE-POWER-MINI	Metal support base		
ZZT-POWER-MINI-KIT-PAR	Kit for parallel installation of cabinet and batteries		