

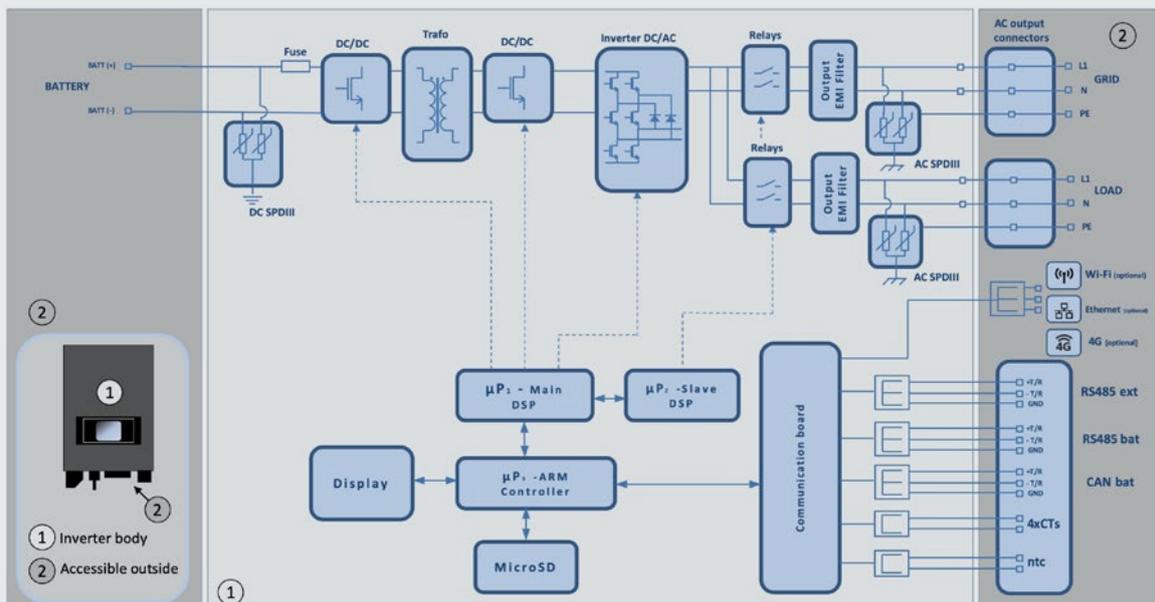
# ZCS AZZURRO- RETROFIT STORAGE INVERTER

3000SP



- » System for retrofit application with energy exchange directly in AC
- » Compatible with all existing inverters already connected to the grid
- » Suitable for installing on both single-phase and three-phase systems
- » Unit compatible with 48V lithium batteries
- » Stand-Alone support mode guarantees continuity of operation in the event of a power failure through the Emergency Power Supply (EPS) function

## FLOW CHART



**TECHNICAL DATA**
**3000SP**

<b>Battery connection data</b>	
Type of compatible battery	Lithium-ion (supplied by Zucchetti)
Rated voltage	48V
Allowable voltage range	42V-58V
Maximum charge/discharge power	3000 W
Allowable temperature range*	-10°C/+50°C
Maximum charge current	65A (programmable)
Maximum discharge current	65A (programmable)
Charge curve	Managed by the battery's BMS
Depth of Discharge (DoD)	0%-90% (programmable)
<b>AC input (grid side)</b>	
Rated power	3000 W
Maximum Power	3000VA
Maximum current	13A
Connection type/Rated voltage	Single-phase L/N/PE 220, 230, 240V
AC voltage range	180V-276V (according to the local standards)
Rated frequency	50Hz/60Hz
AC frequency range	44Hz -55Hz / 54Hz -66Hz (according to the local standards)
Total harmonic distortion	< 3%
Power factor	1 default (Programmable +/- 0.8)
<b>EPS Output (Emergency Power Supply)</b>	
Maximum power supplied in EPS mode**	3000VA
EPS output voltage and frequency	Single-phase 230V 50Hz/60Hz
Current supplied in EPS mode	13A
Apparent peak power in EPS mode	4000VA for 10s
Total harmonic distortion	< 3%
Switch time	< 3s (programmable from display)
<b>Efficiency</b>	
Maximum battery charge efficiency	95%
Maximum battery discharge efficiency	95%
Consumption in stand-by	< 5W
<b>Protections</b>	
Internal interface protection	Yes
Safety protections	Anti-islanding, RCMU, Ground Fault Monitoring
Overheating protection	Yes
Overvoltage category/Protection class	Overvoltage Category III / Protection class I
Integrated dischargers	AC MOV: Type 3 Standard
Battery soft start	Yes
<b>Standard</b>	
EMC	EN 61000-6-1/2/3/4, EN 61000-6-2/3
Safety standard	IEC 62116, IEC 61727, IEC 61683, IEC 60068-1/2/14/30, IEC 62109-1/2
Grid connection standard	Connection certificates and standards available on <a href="http://www.zcsazzurro.com">www.zcsazzurro.com</a>
<b>Communication</b>	
Communication interfaces	Wi-Fi/4G/Ethernet (optional), RS485 (proprietary protocol), SD card, CAN 2.0 (for battery connection)
Additional inputs or connections	Input for DC current sensor connection + 3 inputs for AC current sensor connection
Data storage on SD	25 years
<b>General data</b>	
Allowable ambient temperature range	-30°C...+60°C (power limit above 45°C)
Topology	High-frequency isolation battery output
Environmental protection class	IP65
Allowable relative humidity range	0%.....95% non-condensing
Maximum operating altitude	2000m
Noise level	< 25dB @ 1mt
Weight	16Kg
Cooling	Natural convection
Dimensions (H x W x D)	530mm x 360mm x 173mm
Display	LCD
Warranty	5 or 10 years

\* Standard value for lithium batteries; maximum operating range between +10°C/+40°C

\*\* Power output in EPS mode depends on the type of batteries and the status of the system (e.g. residual capacity, temperature)