

AZZURRO - RETROFIT STORAGE INVERTER

3000SP



■ Energy exchange directly in AC,
without the need for external control or
interface systems

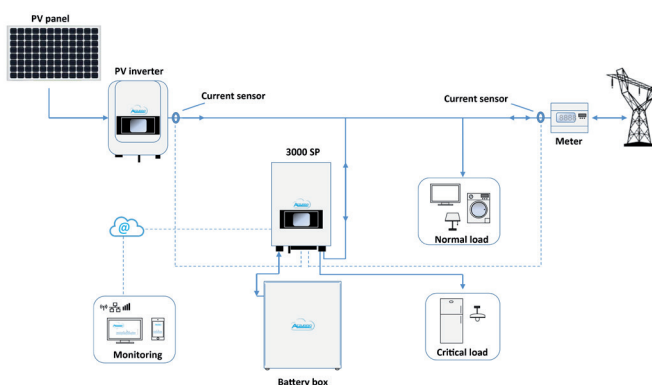
■ Compatible with all existing inverters
already connected to the grid

■ Suitable for installing on both single-
phase and three-phase systems

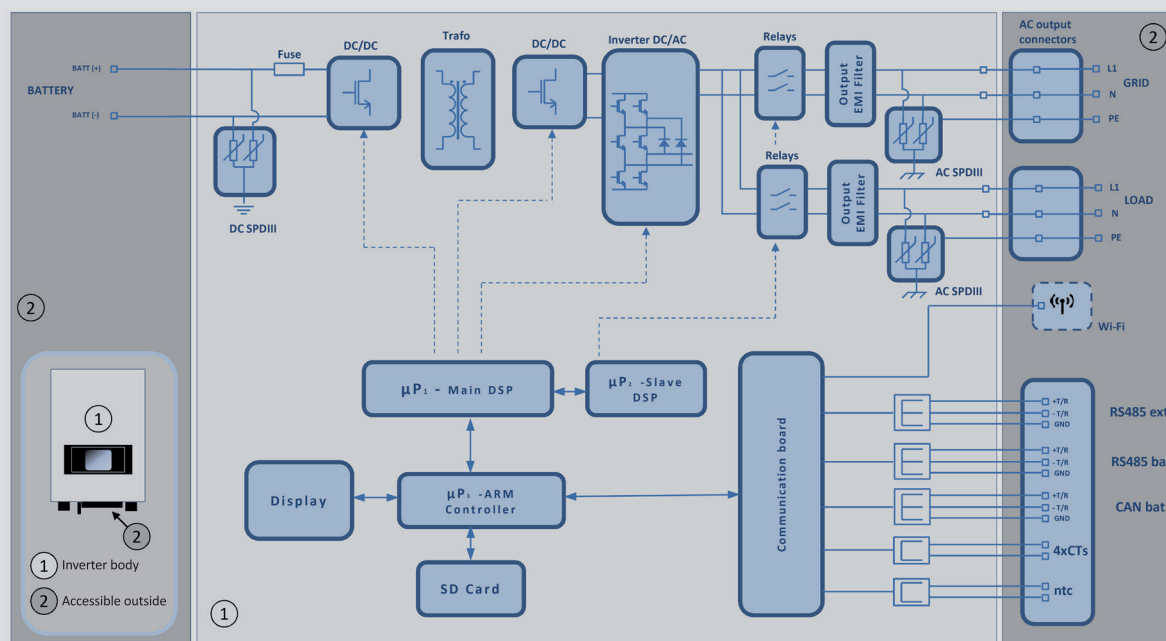
■ Unit compatible with both lithium
batteries and other 48V technologies

■ Stand-Alone support mode guarantees
continuity of operation in the event of
power failure through the Emergency
Power Supply (EPS) function

STORAGE DIAGRAM



FLOW CHART



TECHNICAL DATA - 3000SP

Battery connection technical data	
Type of compatible battery	Lithium-ion (supplied by Zucchetti)
Rated voltage	48V
Allowable voltage range	42V-58V
Recommended battery capacity	50Ah- 200Ah
Maximum charge/discharge power	3000W
Allowable temperature range*	-10°C-50°C
Maximum charge current	65A (programmable)
Maximum discharge current	65A (programmable)
Charge curve (Lithium)	Managed by the battery's BMS
Depth of Discharge (DoD)	Lithium-ion: 0%-90% (programmable);
AC input (grid side)	
Rated power	3000W
Maximum Power	3000VA
Maximum current	13A
Connection type/Rated voltage	Single-phase L/N/PE 220, 230, 240V
AC voltage range	180V-270V (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)
EPS Output (Emergency Power Supply)	
Power supplied in EPS mode** in the absence of photovoltaic production	3000VA
EPS output voltage and frequency	230V 50Hz/60Hz
Current supplied in EPS mode	13A
Total harmonic distortion	< 3%
Switch time	< 3s default (programmable from 1 to 999s)
Efficiency	
Maximum charge efficiency	94.1%
Maximum discharge efficiency	94.3%
Consumption in stand-by	< 5W
Protections	
Internal interface protection	Yes
Safety protections	Anti-islanding, RCMU, Ground Fault Monitoring
Overheating protection	Yes
Overvoltage category/Protective class	Overvoltage Category III / Protective class I
Battery soft start	Yes
Standard	
EMC	EN 61000-6-1/2/3/4,
Safety standard	IEC 62116, IEC 61727, IEC 61683, IEC 60068-1/2/14/30, IEC 62109-1/2
Grid connection standard	CEI 0-21, RD1699, AS4777, VDE 0126-1-1, G83/2, EN50438, VDE-AR-N4105, UTEC15/712-1
Communication	
Communication interfaces	Wi-Fi, 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
General data	
Allowable ambient temperature range	-25°C...+60°C (power limit above 45°C)
Topology	High-frequency isolation
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 L x D)	532mm 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)