

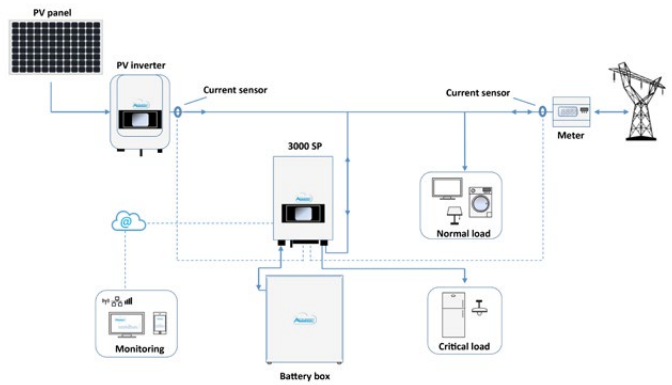
AZZURRO - RETROFIT STORAGE INVERTER

3000SP

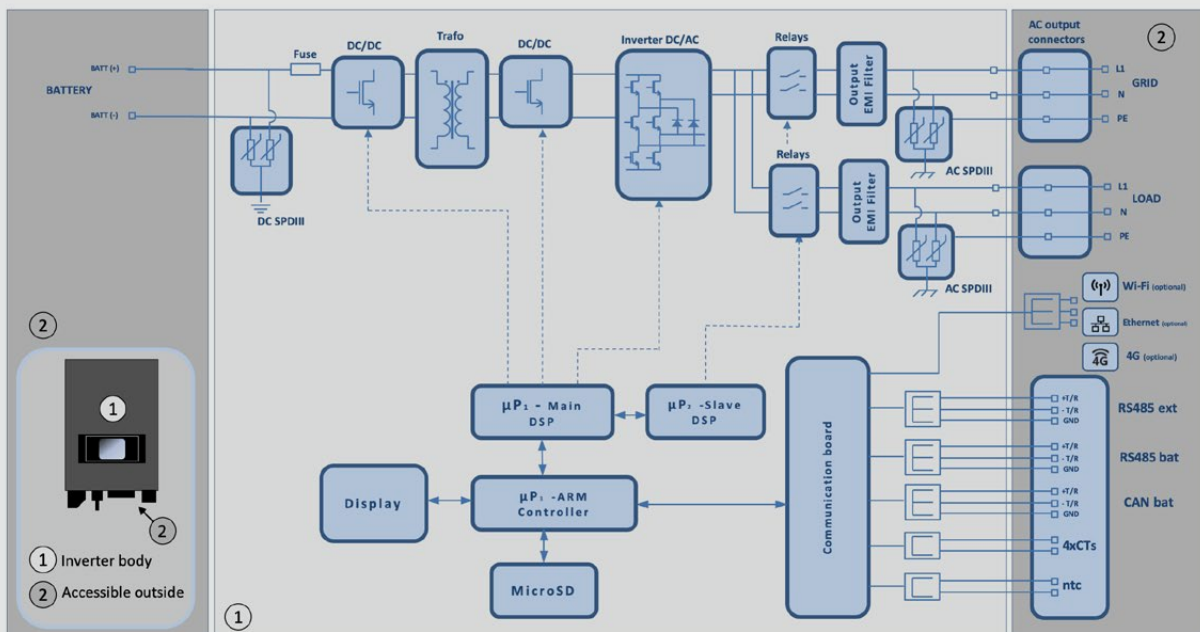


- Energy exchange directly in AC, without the need for external control or interface systems
- Compatible with all existing inverters already connected to the grid
- Suitable for installing on both single-phase and three-phase systems
- Unit compatible with both lithium batteries and other 48V technologies
- 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 input data**

Type of batteries	Lithium Ion (supplied by Zucchetti)
Nominal voltage	48V
Voltage range	42V-58V
Maximum charge/discharge power	3000W
Allowed temperature range*	-10°C/+50°C
Maximum charge current	65A (set)
Maximum discharge current	65A (set)
Charge curve	Managed by integrated BMS
Depth of Discharge (DoD)	0%-90% (set)

AC output

Nominal AC Power	3000W
Maximum AC Power	3000VA
Maximum AC current each phase	13A
Type of connection/Nominal AC grid voltage	Single phase L/N/PE / 220V,230V,240V
AC voltage range	180V~276V (according to local standards)
Nominal AC frequency	50Hz/60Hz
AC frequency reange	45Hz~55Hz / 54Hz~64Hz (according to local standards)
Total Harmonic Distortion (THD)	<3%
Power factor	1 (set +/-0.8)

EPS (Emergency Power Supply) output

Maximum Power in EPS**	3000VA
Voltage and frequency in EPS	Single Phase 230V 50Hz/60Hz
Maximum current in EPS	13A
Peak of apparent power in EPS	4000VA for 10s
Total Harmonic Distortion (THD)	< 3%
Switch time	< 3s (set from display)

Efficiency

Maximum charge efficiency	95%
Maximum discharge efficiency	95%
Standby consumption	< 5W

Protections

Internal interface protection	Yes
Safety protections	Anti islanding, RCMU, Ground Fault Monitoring
Overheating protection	Yes
Overvoltage category/Protection class	Overvoltage Category III / Protective class I
Integrated dischargers	AC/DC MOV: Type 3 standard
Battery Soft start	Yes

Standard

EMC	EN 61000-6-1/2/3/4, EN 61000-6-2/3
Safety standards	IEC 62116, IEC 61727, IEC 61683, IEC 60068-1/2/14/30, IEC 62109-1/2
Grid standards	Grid standards and certificates available on www.zcsazzurro.com

Communication

Interfaces	Wi-Fi/4G/Ethernet (optionals), RS485 (proprietary protocol), SD card, CAN 2.0 (Battery data connection)
Additional I/O	DC Current sensor connection input + 3x AC Current sensor connection input
SD card data storage	25 years

Environmental data

Temperature working range	-30°C...+60°C (power derating over 45)
Topology	Battery output high frequency isolated
Environmental protection degree	IP65
Humidity range	0%.....95% no condensing
Maximum operative altitude	2000m
Acustic noise	< 25dB @ 1mt
Weight	16Kg
Cooling system	Natural cooled
Dimensions (H*W*L)	530mm*360mm*173mm
Display	LCD
Warranty	10 years

* Standard value for lithium-ion batteries; maximum operativity in the range +10°C/+40°C

** Power in EPS depends on battery type and on status of the storage system (residual capacity, temperature)