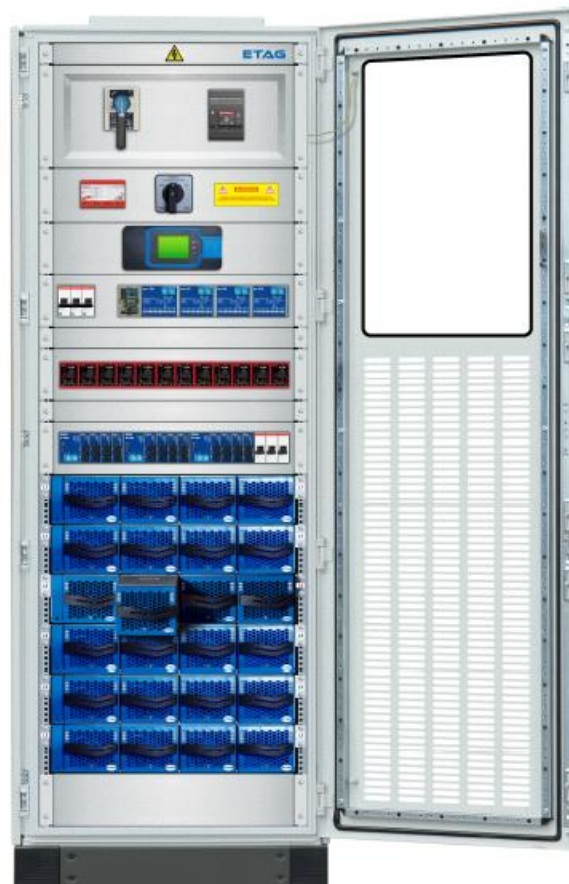


Why Hybrid CBS system?



1. Central battery system is fully modular, encapsulated, plug-in, hot swappable addressable and live expandable
 2. 108 kVA CBS in a smallest footprint, limiting to 2000H x 600W x 800D in mm
 3. The master-master operation topology eliminating a single-point-failure in the System and ensures no shut down in case of failure of an inverter module.
 4. The power transfer from VAC to VDC & vice-versa in ZERO milli seconds.
 5. Each bidirectional Inverter is featured with built-in short circuit (Isc) isolator guarantees safe output power and recharge of battery bank.
 6. Each inverter modules featured with built-in independent –
 - Micro processor
 - Static switching function
 - Redundant synchronization bus
 - Redundant communication bus
 - 4 levels protection fuses
 7. The rectifier charger is inbuilt in each bidirectional Inverters module ensuring seamless battery recharging process and eliminating failure of float-charge/recharge. Each Inverter is built with 300W redundant power for dedicated for IU characteristic charging, is a 20th century proven innovation.
 8. The hybrid Inverter modules/Charger Rectifier's-
 - Mean time between failure **(MTBF) is 24.7 years**
 - Mean time to repair/replace **(MTTR) is max 10 minutes without shut-down**
 9. CBS system is featured with brown voltage protection up to 150VAC CBS system delivers healthy mains output.
 10. The System featured with inventive phase failure protection –
 - System continue to deliver healthy power against 1 phase failure by drawing battery power for the effected phase only
 - System continue to deliver healthy power against 2 phases failure by drawing battery power for the effected phases only
- These features are full compliance to SIL 2 and NFPA 101 standards.



Why Hybrid CBS system?



11. The automatic load sharing between Inverter modules catalyses a fully balanced load at the grid regardless of unbalanced single-phase power consumption, is a peerless solution.
12. The constant output power (380V_{AC}-230V_{AC}/50...60Hz) regardless of input power drops to 190V_{AC}/50...60Hz and the end of discharge (EOD) of battery power. Hence the cable over sizing is automatically becomes saving.
13. The Inverter System efficiency is 96% on V_{AC} load and 93% on V_{DC} load.
14. DZB Inverters comply 100% to NFPA, UL standards and mandatory requirement of social insurance policies governed by American and European property Insurance companies.



Expandable CBS system – 7.5 kVA 3 Phase input/ 3 Phase output- [Single Feeder](#)
- 225 kVA 3 Phase input/ 3 phase output



The above CBS system rating upto 240 kVA is certified by BSI Kite mark and approved the Local Civil Défense authority

Made in Belgium



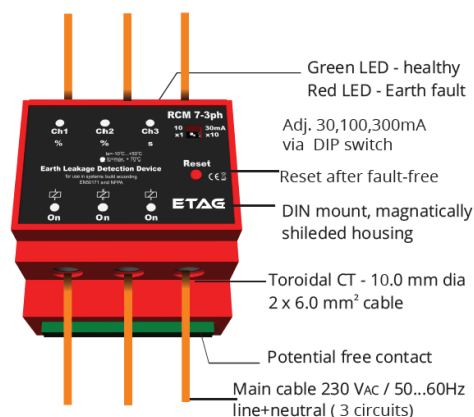
Why Hybrid CBS system?



15. DZB Inverters is designed and built to comply 100% to NFPA, UL standards and mandatory requirement of social insurance policies governed by American and European property Insurance companies.

16. The Life Safety CBS System is engineered with complete protection to human life and fire hazards as per mandatory NFPA norms:

- The intelligent sub-station is equipped with RCM 7 to protect each outgoing circuit from earth leakage in normal as well as emergency conditions (continuous monitoring) as per NFPA 70. The address and status display in the central controller



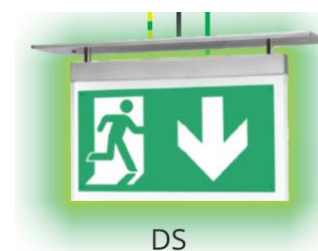
- Each Area must be powered from dual supply. It means dual inputs changeover module situated in the EM & EX (BS/DS) luminaire's



- UWE 2 MS/ 200W (Optional 500W)
- UWE 2 MD (Dali)/200W (optional 500W)

This requirement too is mandatory as per NFPA 101 clause 7.9.2.3(2)

- Unaffected area EXIT luminaires (DS) shall **"flash"** in case of fire to ease the direction to egress point as per NFPA 101 clause 7.10.5.2.2



Fire affected area EXIT must be blocked.

Flashing against Fire



17. The brand ETAG CBS System manufacturer, CE+T Belgium, the DNA is been awarded by Google USA, who won the [Little Box Challenge](#) against 170 world renowned manufacturer's, is the evidence for its-

- 2.0 kVA Inverter, as compact as 2 Packets of Cigarettes.
- Reliability
- Durability
- **EMC** compliance/certified
- Flexibility & holt-line expandability
- Performance of 100 hrs. test
- Proven, no single-point-failure
- MTBF 240,000 hrs (**27.4 years**)
- MTTR is ≤ 10 minutes is the track record against world renowned brands.



The Brand ETAG, DZB Central Battery System has performance proven track record of more than 250 plus installations in the Middle East. You may contact ETAG Middle East (info@etagmbh.com , Contact# 00971 55 9076079) for the Site visits & demo and/or to visit production Factory in Europe.

