

# Protecting Data

How Vanguard Powersol backup systems protect data at Techno Brain HQ

## The New oil

In today's digital age there is the saying "Data is the new oil" coined by Clive Humby, which highlights the importance of data. Today data is used to fuel Analytics and Artificial intelligence, so there is a need to protect it from loss or corruption.

## Situation analysis

Among the ways that data gets lost or corrupted is due to unpredictable power supply that results in surges damaging critical IT infrastructure. Techno Brain Group - Africa's leading ICT solutions and education and training provider needed a power backup solution to protect their critical IT and office equipment.

Among the requirement was the need to have a system with sufficient runtime in case of an outage. With these requirements in mind, Vanguard Powersol tackled this problem by installing a UPS (uninterrupted power supply) system coupled with a super-charger and external battery racks.

## Solution

Vanguard Powersol Limited provided a modular true hot-swap premium Shield™1 M10U, 20 kVA UPS which is supercharged for the required large backup time (4-6hrs). The UPS consist of a C40, M10U UPS chassis that includes the bypass module



The UPS installation at Techno Brain with a supercharger



External battery racks that required for a longer runtime

and space for four power modules. The system is occupied by two M10U (Unity Power Factor)<sup>2</sup> power modules and one supercharger module. It's important to note that normally UPSs chargers are designed only for a maximum of 30 minutes of backup time. In which case, if these UPS are loaded with a larger battery bank you can either have UPS charger failure or your battery bank will not give you the expected life because of improper charge current.

By adding the supercharger module we can provide enough charge current to support the large battery bank that is required for the long runtime. The Shield™ M10U UPS is a premium modular UPS which means we can achieve an internal redundancy by adding a power module. While the M10U UPS serves the critical server room, we have also provided Shield™ R3 25U, 25kVA rackmount 3-phase UPS to serve the workstations at Techno Brain testing facilities.

The Shield™ R3, 25U, has also been wired to act as a redundant UPS unit for the critical server. As Techno Brain expanded its testing facilities and added more workstations they requested for an additional single-phase UPS to backup these workstations. We added the Shield™ R1 10U (Unity Power Factor) UPS to back up their new workstation facility.

## Technical Summary

The installed units were as follows:-

1. 3 shield UPS systems, the models are below:-
  - Shield™ R1 10U - Rated power: 10KVA
  - Shield™ C40 M10U - Rated power: 20 KVA
  - Shield™ R3 25U - Rated power: 25KVA
2. Supercharger unit
3. External batter rack

## About Vanguard Powersol Ltd.

Established in 2013, VPL is gaining popularity and growing exponentially because of the products, solutions and service that we provide. We have partnered with several reputable global brands to provide solutions for:-



**Power protection**



**Back-up systems**



**Alternative energy**



**Structured cabling**



**Fiber optic cabling**



**Precision cooling systems**



**Data center infrastructure**

We are the best at what we do. We give reliable, future proof solutions that is backed up by our dependable service team.

## Endnotes

1. Vanguard Powersol is the authorized distributors of Shield™ Systems in Kenya
2. The power factor of an AC power system is defined as the ratio of the real power absorbed by the load to the apparent power flowing in